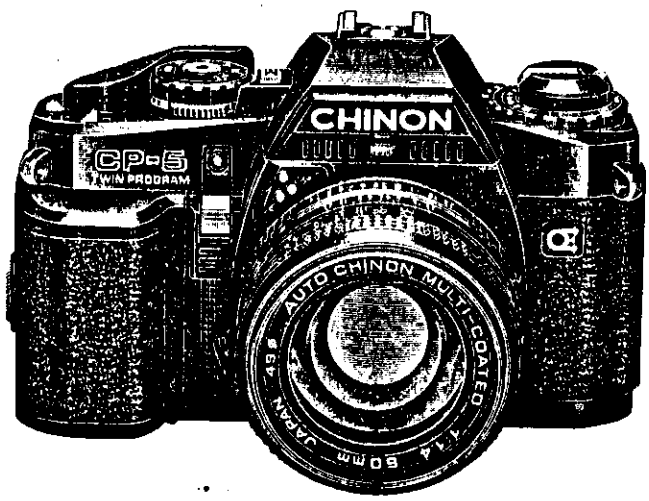
Service Manual

FOR

CHINON CP-5

TWIN PROGRAM



CHINON INDUSTRIES INC.

INTRODUCTION

Information contained in this service manual refers to the CHINON CP-5 TWIN PROGRAM S.L.R. camera and is prepared to aid repair and maintenance service at authorised service stations.

The information and specifications in this service manual are the most up-to-date at the time of publication. However, the Research, engineering, and QA Department of CHINON are constantly making efforts to further improve the products manufactured by the company. Modification, therefore, may become inevitable and we reserve the right to make any changes without further notice.

Before making attempts to repair or adjust the unit, read the manual thoroughly. Specifications and adjustment procedures are described in detail and trouble-shooting may be used to diagnose problems. Electrical data and parts information are filed at the end of this service manual.

For technical inquires and further assistance write to:

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Service Manual
for
CHINON CP-5 TWIN PROGRAM S.L.R. Camera

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CHINON INDUSTRIES INC.
Service Department.

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HOW TO USE THIS SERVICE MANUAL

Chinon Service manual consists of the following seven sections: General, Repair Guide, Service Tool List, Electrical Data, Parts Information, Price List of the Spare Parts, and Service Manual Report. These seven sections are divided by index sheets for easy identification.

GENERAL

The General section consists of information useful to the repairman. It may consists of any or all of the following: technical specifications, block diagram, design principals, new or unusual repair technics, or any other information useful to the repairman.

REPAIR GUIDE

1. The Repair Guide contains the necessary instructions for complate repair, adjustment, and trouble shooting of the product.

2. It may consist of circuit and/or mechanism explanations.

SERVICE TOOLS LIST

1. This list all special tools and test equipment required for service after sales and their uses.

2. For specifications, detailed explanation, and price of these, please refer to the distributed lists of "TOOLS & INSTRUMENTS".

3. Please typeout the tool No. and the necessary quantity on the orther sheets when you order the special tools or test equipment.

ELECTRICAL DATA

The Electrical Data consists of the schematic diagram, wiring diagram, and component location useful to the repairman.

PARTS INFORMATION

1. The Parts Information consists of the exploded view and containing parts list.

2. The parts list for each exploded view is on the facing page and botf pages have the same number.

3. The exploded views are arranged in the correct sequence of disassembly and/or assembly.

4. The parts list consists of six columns. The function of each column is:

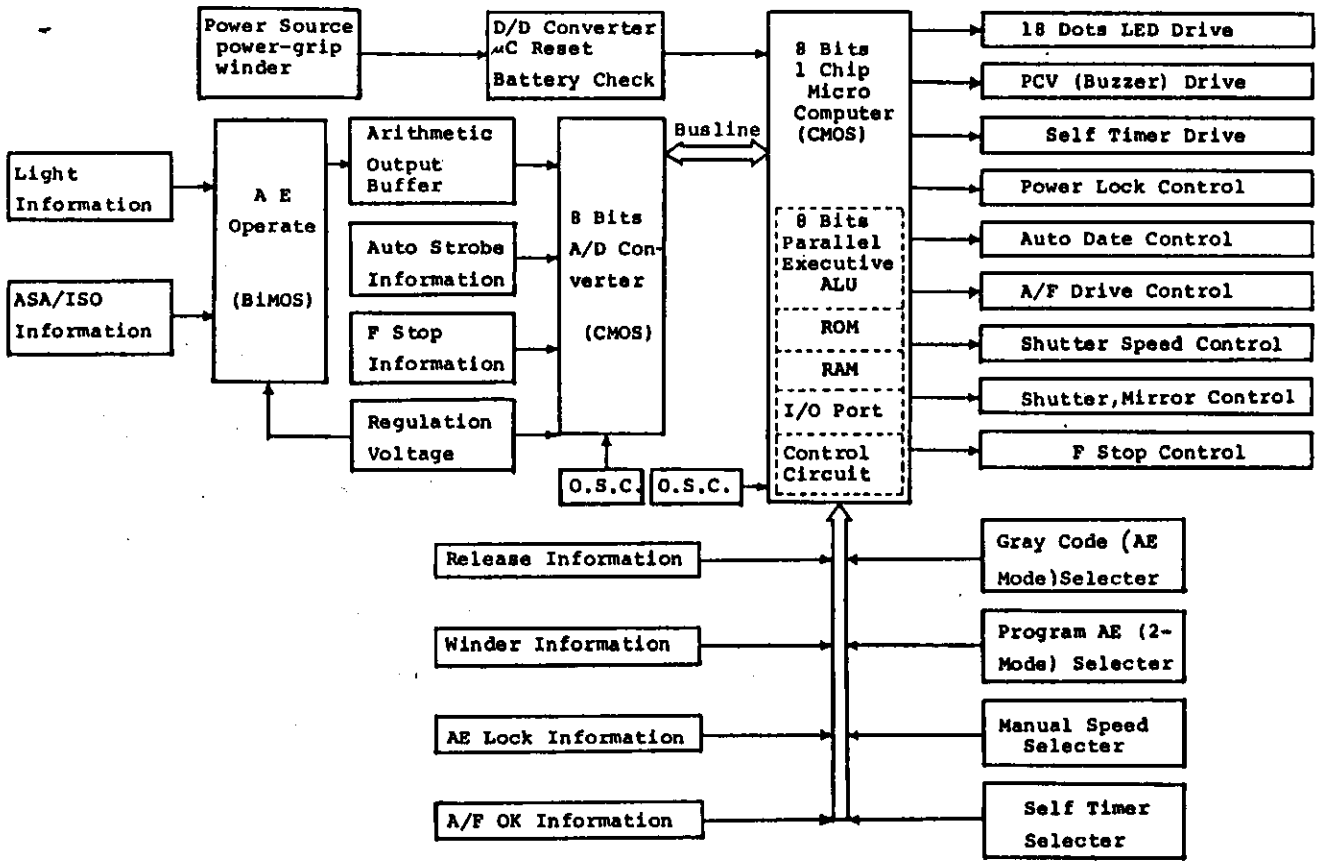
   Column 1. ORDER QTY: Please fill-in the necessary quantity in this column when you order the spare parts, and typeout your name and Order No. on the parts list.
   Column 2. Parts name in Japanese.
   Column 3. CLASS: This column lists the consumption code letter for the part. This indicates the replacement probability. The parts listed on the PARTS LIST are each maked with one of the letters A, B, C, D, and E in accordance with the freqency at which it is used in servicing.
   - A: Used most frequency.
   - B: Used very frequency
   - C: Used frequency.
   - D: Used less frequency.
   - E: Used rarely.

SPECIFICATION

Technical Specifications	CHINON CP-5 TWIN PROGRAM	Remarks
Type	SLR, Two-Stage Program and Aperture-priority system (AE)	
Picture Mount	24 x 36 mm	
Lens Mount	Bayonet mount with built-in active AF lens contacts	
Mirror	Lage, quick return, shockless system	
Focusing Aid	Penta prism, split-micro screen	
Viewfinder Coverage	Approx. 92 %	
Viewfinder Magnification	Approx. 0.87 times with 50 mm lens set at	
Viewfinder Indication	Shutter speed, under/over exposure, slow shutter speed warning, flash synchro, program AE, F number (optical)	Red, Green & Yellow LEDs. audible buzzer
Exposure Meter	TTL, center weighted full aperture system	
Photo Cell	1 x silicon photo diode	
Exposure Control Range	EV 1 - 19 (8 sec., F/1.4 - 1/1000 sec., F/22)	At ASA 100
ASA Sensitivity	ASA/ISO 25 - 3200 (DIN 15 - 36)	1/3 EV step with safety lock
Exposure Memory	Built-in	
Multiple Exposure	Built-in	
Shutter	Electro-magnet, vertical focalplane	
Shutter Speed	Auto: 8 - 1/1000 sec. Manu: B, X (1/100), 8 - 1/1000 sec.	Stepless
Shutter Release	Electro-magnetic type	
Program AE Mode	Two-Stage available Program 1: For fast moving objects. Lens aperture stays open up to the shutter speed of 1/60 sec. Between 1/60 - 1/1000 sec., the aperture varies in accordance with the programmed shutter speed. Program 2: For slow moving objects, depth-of-field well considered AE charactor. Lens aperture stays full open up to the shutter speed of 1/8 sec. At faster than 1/8 sec., the aperture varies in accordance with the programmed shutter speed.	

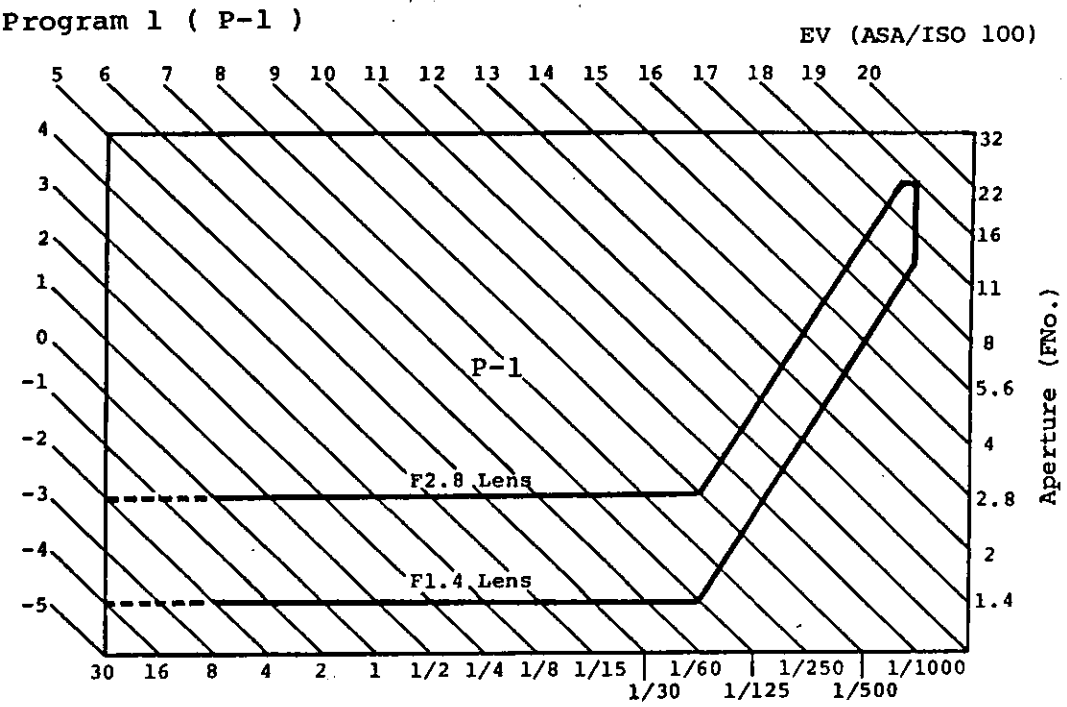
Program AE Mode Warning	Built-in	Green LED
Manual Shutter Speed Selector	One touch activation type	LEDs
S.C.S. (Shutter Speed Change Signal)	Built-in	Audible buzzer
M.E.S. (Manual Exposure Signal)	Built-in	Audible buzzer
Film Winding	Single stroke (130° with 25° stand -off), Power winder adaptable	CHINON Power Winder PW-600, 601
Film Rewinding	Rewinding button & rewinding crank	
Film Counter	Auto reset with back cover open	
Strobe-ready Indicator	1/125 sec. LED & ⚡LED lights up	CHINON Auto Flash S-240, 280, 360
Main Switch Lock	Built-in with shutter speed dial	
Battery Check	Built-in with LED indicator	
Self Timer	Electronically controlled at 10 sec.	Flashing Red LED & audible buzzer
Synchronization	"X" strobe sync. at 1/100 sec.	Hot shoe, PC conector
Direct Imprint Contacts	Built-in	CHINON Auto Date AD-510
AF Contacts	Built-in	CHINON F/3.3 - 4.5 , f=35 - 70 mm AF lens
Tripod Mount	Built-in (screw mount)	JIS 1/4
Memo Holder	Built-in	
Power Source	1.5V x 3 batteries	LR03 in power-grip
Dimensions	136(W) x 88(H) x 51(D) mm	
Weight	520 grams	Without lens, batteries

MICRO-COMPUTER SYSTEM'S BLOCK DIAGRAM
OF
CHINON CP-5

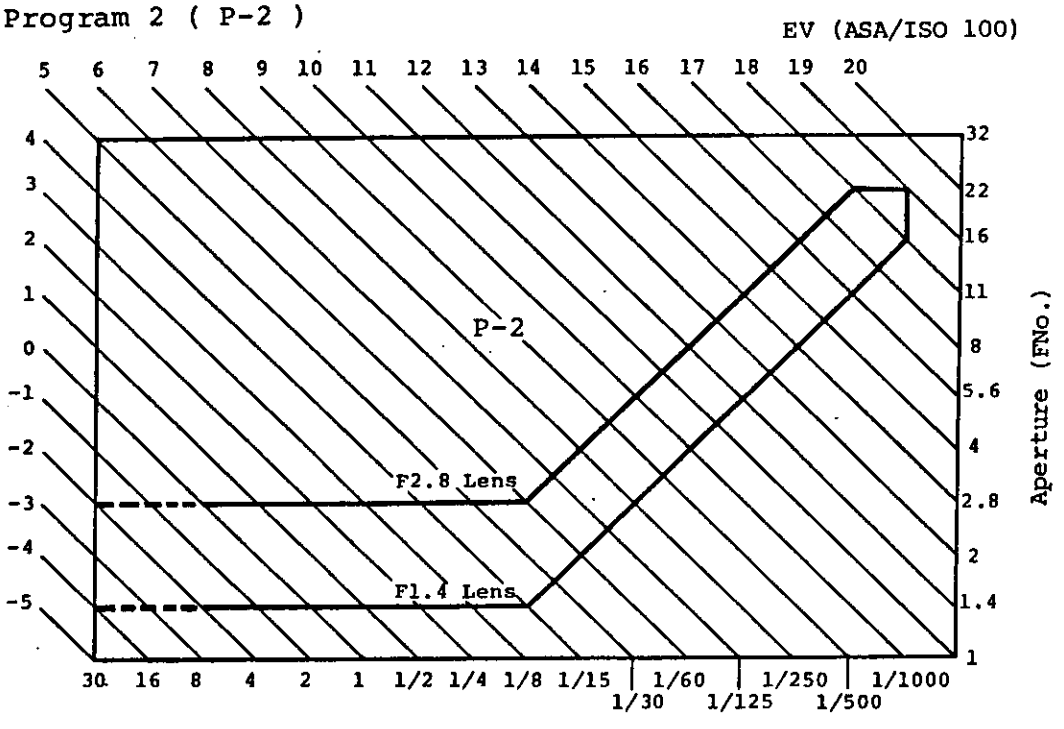


TWO-STAGE PROGRAM AE CURVE
OF
CHINON CP-5

Program 1 (P-1)



Program 2 (P-2)



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* The Trouble shooting will be furnished as soon as possible after trouble shooting procedure are established.

I. DISASSENBLY PROCEDURE

A. Top Cover, Bottom Cover & Front Cover Removal

[In case of Top Cover Removal]

① Name plate 1371B0CS1085A 1371B0CS1085A ② Screw 117-30114 x 2 ③ Screw 127-40114 x 2 ④ Cover 1371B0C-3016A

⑤ Screw 912-70114 ⑥ Advance lever 1371B0C-3015A ⑦ M trim plate 1371B0C-2006A ⑧ Release button guide 1371B0C-2021A

⑨ M dial 1371B0C-2001A ⑩ Release button 1371B0C-2020A ⑪ Release shaft 1371B0C-2028A ⑫ Spring 0971B0C-2022A

⑬ Rewind knob 1171B0CU1031A ⑭ ASA ring 1091B0C-2103A ⑮ Washer XY5-012 ⑯ Spring 1091B0C-2104A

⑰ ASA dial trim plate 1371B0C-2105A and ASA dial 1171B0C-2101A ⑱ Screw 127-35014 x 2 ⑲ Screw 317-35114

⑳ Screw 317-40014 ㉑ Top cover 1371B0CS1061A 1371H0CS1061A

[In case of Bottom Cover Removal]

㉒ Screw 317-60114 x 3 ㉓ Screw 317-35114 x 2 ㉔ Bottom cover 1371B0CS1051A 1371H0CS1051A

[In case of Front Cover Removal]

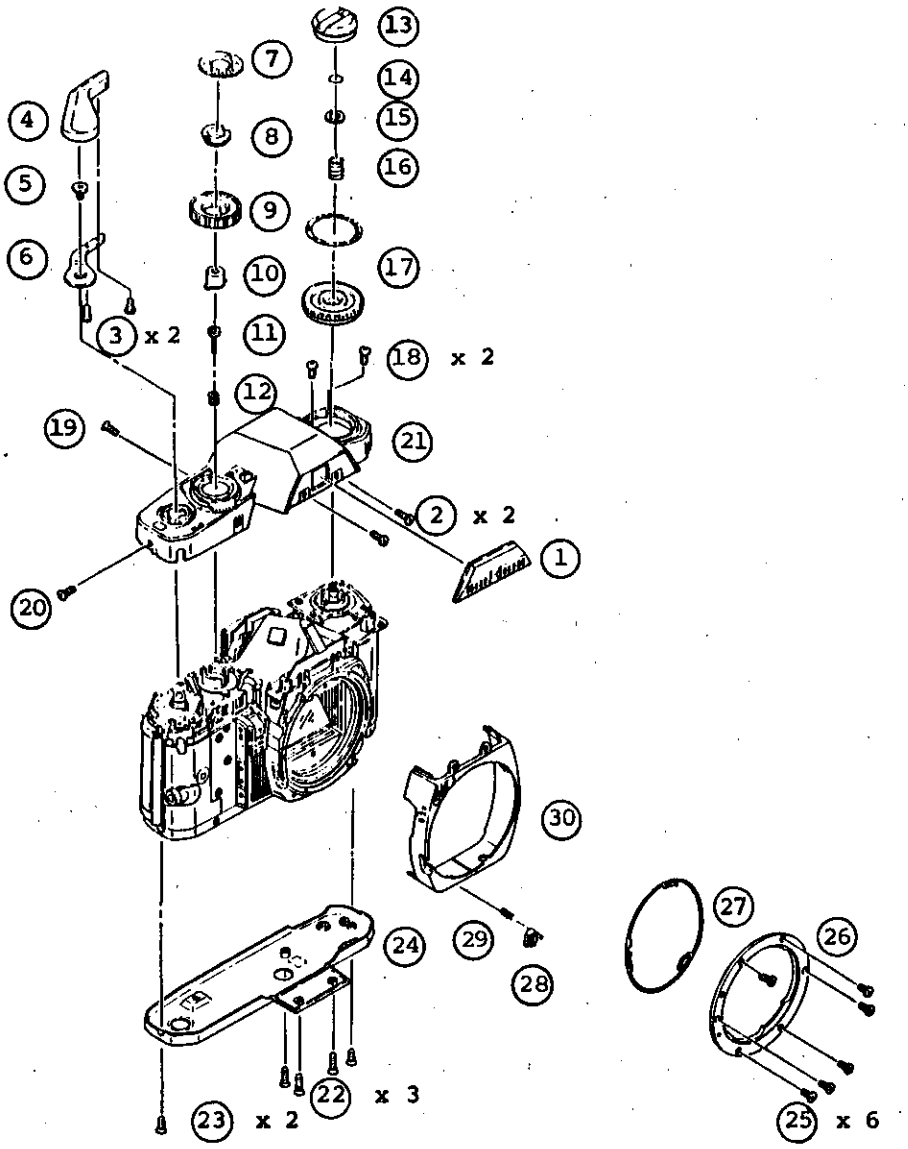
㉕ Screw 112-30134 x 6 ㉖ Bayonet mount 0971B0C-4201A ㉗ Mount spring 0971B0C-4202A ㉘ Mount lock pin 0971B0CS4216A

㉙ Spring 0971B0C-4218A ㉚ Front cover 1371B0CS4205A 1371H0CS4205A

If you remove the Top Cover completly, unsolder the following five lead-wires from Flexible pattern A and body side.

㉛ White lead-wire ㉜ Black lead-wire ㉝ Green lead-wire

㉞ Yellow lead-wire ㉟ Brown lead-wire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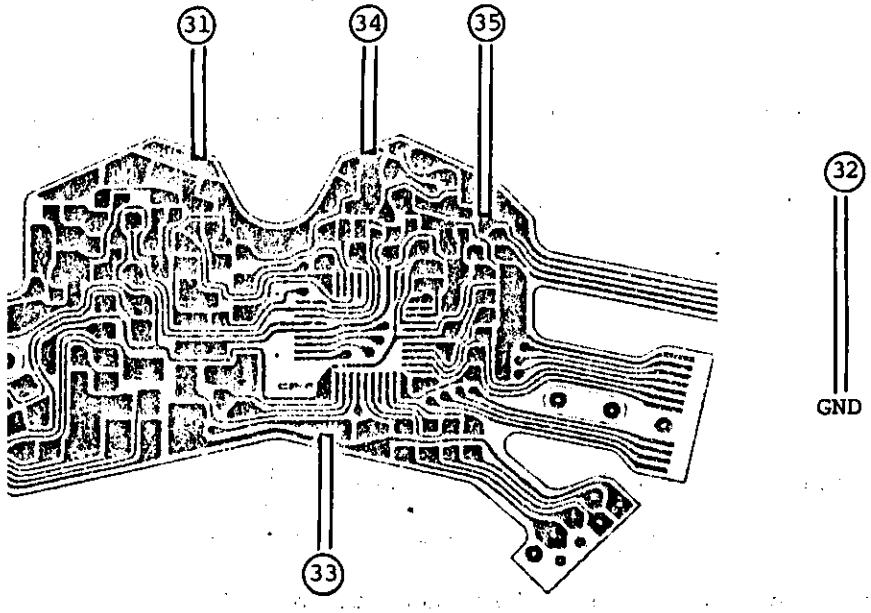
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B. Mirror Housing Removal

Follow the Top, Bottom, and Front Cover Removal. Then,

① Screw 1371B0C-1212A ② Battery case 1371B0CS1201A ③ Leather(R) 1371B0C-1006A ④ Leather(L) 1371B0C-1007A

If you remove the Mirror housing unit completely, unsolder the twenty lead-wires from the Flexible pattern A side and P.C. Boad A side (bottom side) with following procedures.

⑤ Black lead-wire ⑥ Pink lead-wire ⑦ Yellow lead-wire

⑧ Purple lead-wire ⑨ Brown lead-wire ⑩ Red lead-wire

⑪ Blue lead-wire ⑫ Green lead-wire ⑬ Gray lead-wire

⑭ Orange lead-wire ⑮ White lead-wire ⑯ Black lead-wire

⑰ Gray lead-wire ⑱ Pink lead-wire ⑲ Yellow green lead-wire

⑳ Yellow green lead-wire ㉑ Blue lead-wire ㉒ Sky blue lead-wire ㉓ Black lead-wire ㉔ Purple lead-wire

㉕ Screw 112-02614 x 4 ㉖ Screw 112-30121 ㉗ Screw 117-30114 ㉘ Lug plate XB-20300

㉙ Screw 117-30014 x 3 ㉚ Mirror housing 1371B0CS4001A with Frensnel box 1371B0CS4304A and Flexible pattern A 1371B0CSEP27A and M dial base plate 1371B0CS2002A

Procedure ㉛ to ㊲ shows the lead-wires for M dial base plate removal. Unsolder the following lead-wires from Flexible pattern A side.

㉛ Red lead-wire ㉜ Pink lead-wire ㉝ Black lead-wire

㉞ Brown lead-wire ㉟ Orange lead-wire ㊱ Sky blue lead-wire

㊲ Yellow lead-wire Then, disconnect the position ㊳. ㊴ M dial base plate 1371B0CS2002A

Procedure ㊵ to ㊺ shows the lead-wires for Flexible pattern A removal. Unsolder the following lead-wires.

㊵ Red lead-wire ㊶ Blue lead-wire ㊷ Red lead-wire

㊸ Sky blue lead-wire ㊹ Gray lead-wire ㊺ Green lead-wire

㊻ Yellow lead-wire ㊼ Blue lead-wire ㊽ Orange lead-wire

㊾ Blue lead-wire ㊿ Green lead-wire (51) Purple lead-wire

(52) Red lead-wire (53) White lead-wire (54) Earth lead-wire

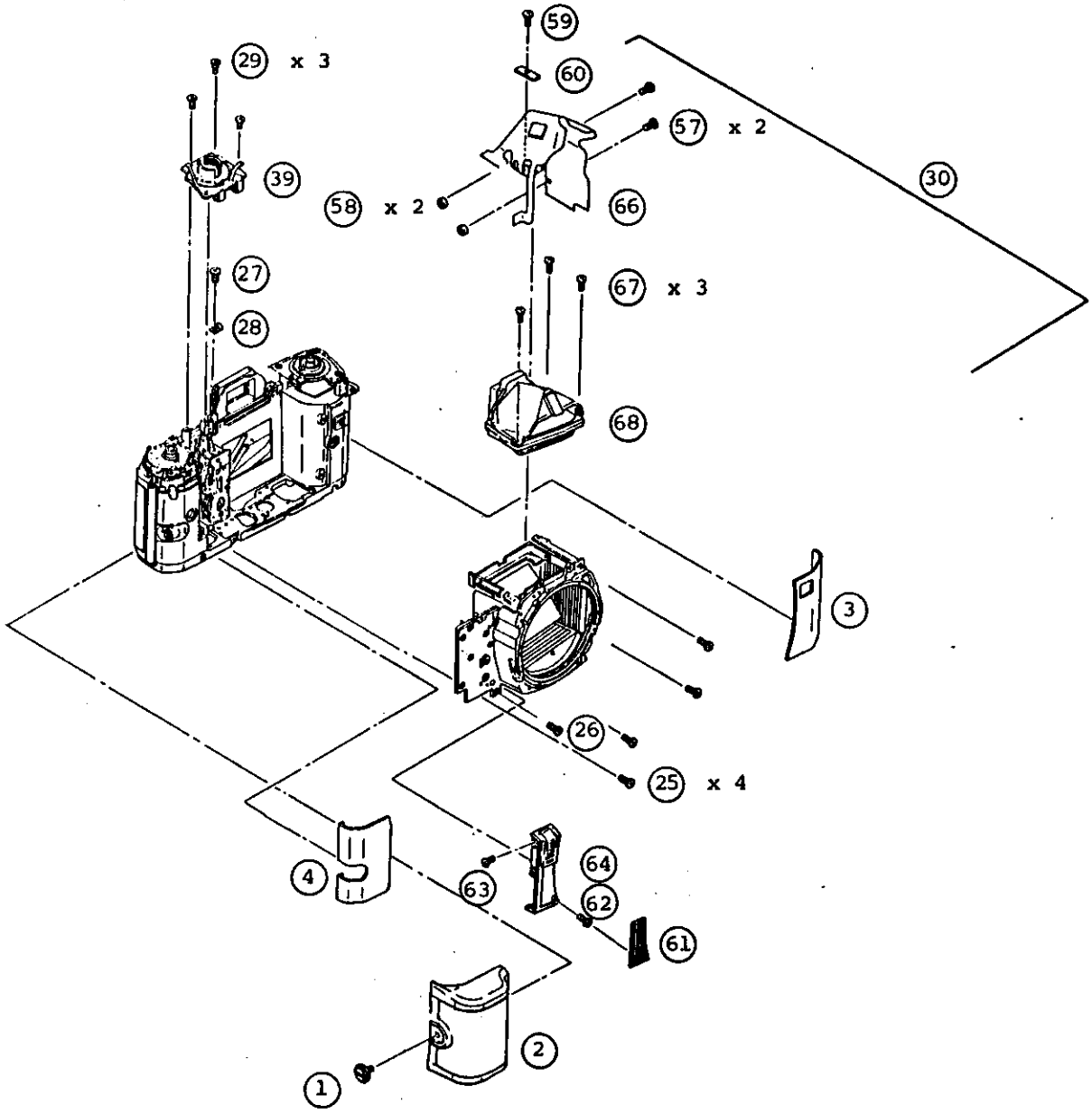
(55) White lead-wire Then, disconnect the position (56).

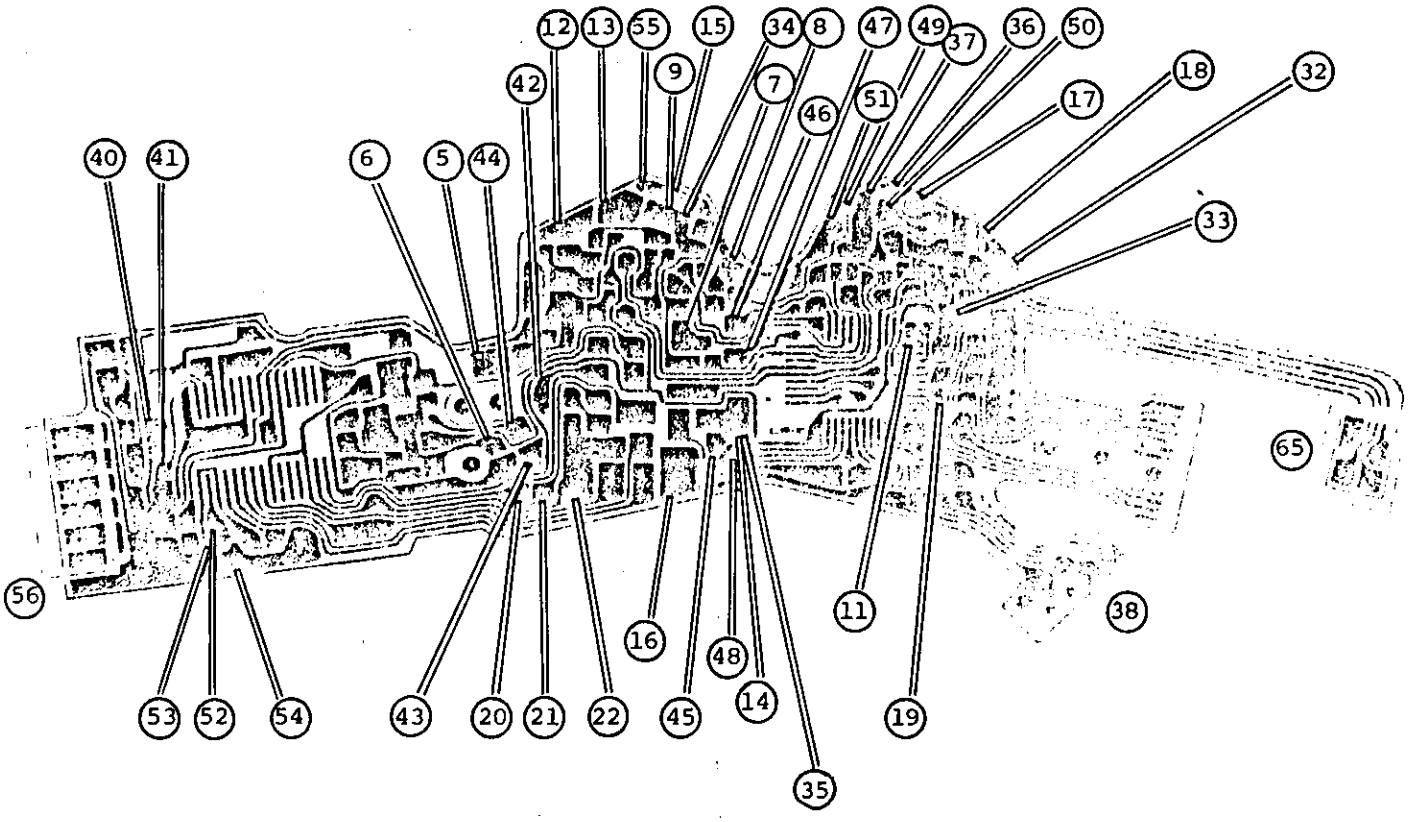
(57) Screw 117-35214 x 2 (58) Collar 1171B0C-4014A x 2 (59) Screw 114-30114 (60) LED holder 0971B0C-4309A

(61) Leather 1371B0C-4259A (62) Screw 317-25014 (63) Screw 317-62814 (64) Front decoration plate 1371B0CS4260A

Then, disconnect the position (65). (66) Flexible pattern A 1371B0CSEP27A

(67) Screw 117-30114 x 3 (68) Frensnel box 1371B0CS4304A

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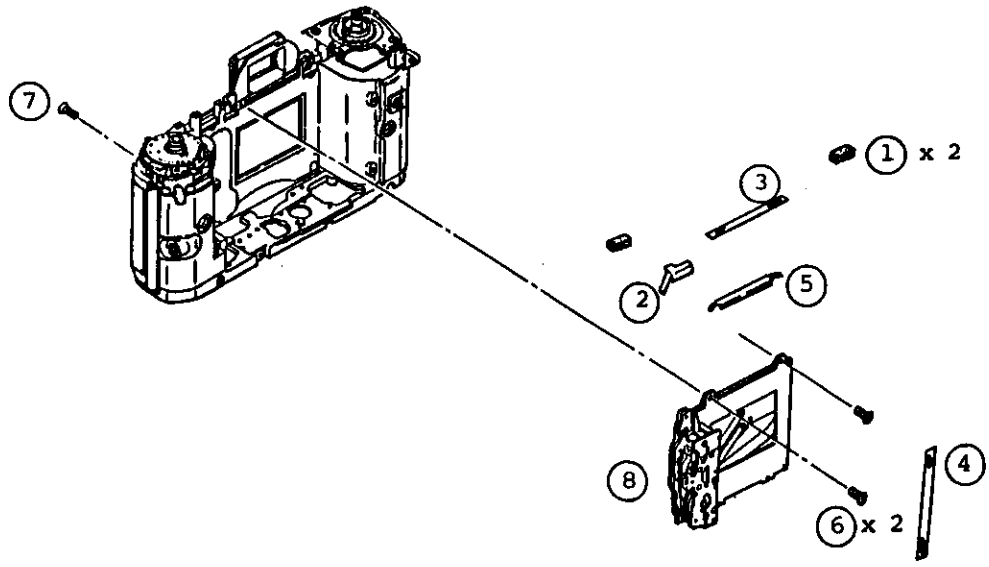
Batt.
GND
M dial plate
Main SW.

C. Shutter Removal

Refer to following procedure after Mirror housing removal.

① Sponge XM-3020 x 2 ② Side plate 0971B0C-1504A ③ Sponge XM-1025 ④ Sponge XM-1036 ⑤ Shielding plate 0971B0C-1502A

⑥ Screw 317-30021 x 2 ⑦ Screw 317-30014 ⑧ Shutter 1291B0C-1501A



D. Sprocket Removal

Follow the Top cover removal, then

① Screw 117-30114 x 2 ② Screw 317-30014 ③ Counter 1371B0CS2201A ④ Screw 113-03014

⑤ Claw pressure plate 0971B0C-3013A ⑥ Transport claw 0971B0CU3006A ⑦ First gear 0971B0C-3038A

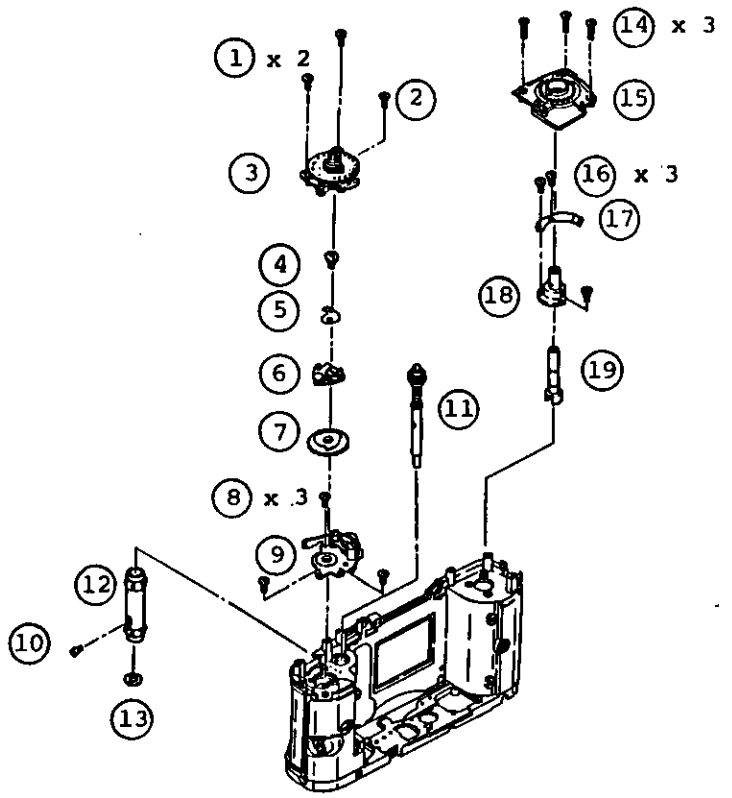
⑧ Screw 117-30114 x 3 ⑨ Winding base plate 1371B0CS3031A ⑩ Screw 0271W0C-0153A

⑪ Sprocket shaft 1071B0CS3052A ⑫ Sprocket 0771B0C-3051A ⑬ Washer XY4-009

If you remove the Rewinding shaft,

⑭ Screw 317-60014 x 3 ⑮ ASA base plate 1171B0CU2109A ⑯ Screw 117-25614 x 3

⑰ Door latch spring 0971B0C-1044A ⑱ Rewinding shaft base 1091B0C-1037A ⑲ Rewinding shaft 1091B0C-1036A



E. Take-up Spool Removal

Follow the procedure after Sprocket Removal, then

① Gear 0971B0C-3064A and Reel sleeve 1371B0C-3063A and Friction spring 0971B0C-3065A

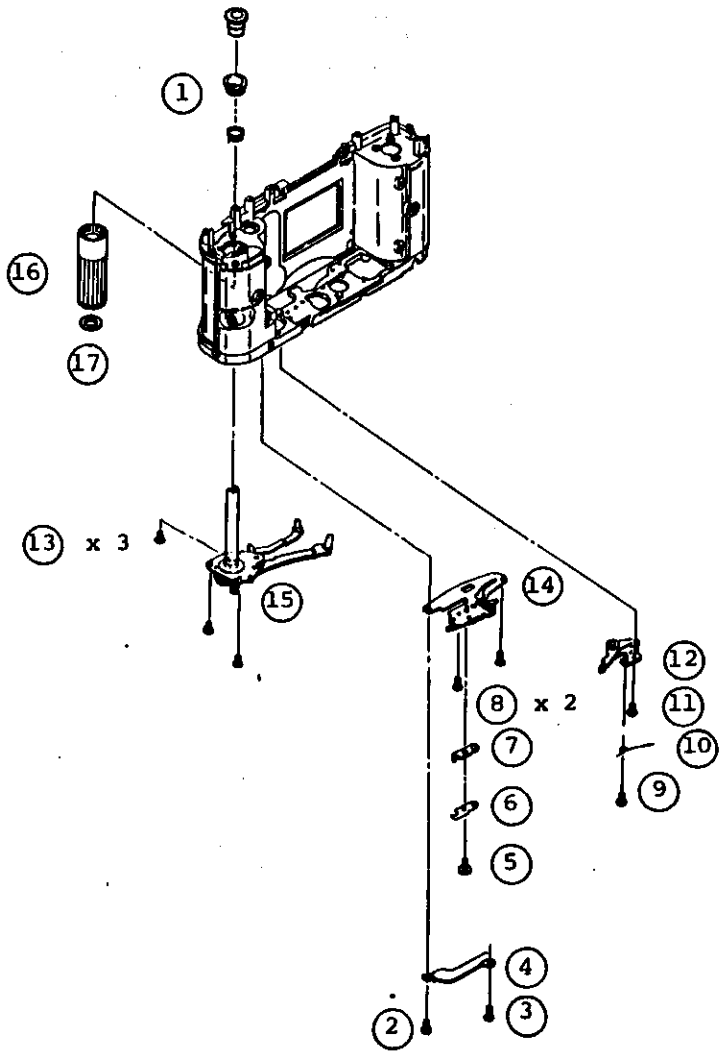
② Screw 117-40114 ③ Screw 112-40121 ④ Charge lever holder 0971B0C-3108A ⑤ Screw 117-02414

⑥ Cover 0971B0C-3129A ⑦ Winder switch 1371B0CS3126A ⑧ Screw 317-30021 x 2 ⑨ Screw 917-50114

⑩ Spring 0971B0C-3088A ⑪ Screw 117-25114 ⑫ Stop lever 0971B0CU3085C ⑬ Screw 312-25114 x 3

⑭ Guide base plate 1371B0CS3125A ⑮ Winding base plate (Lower) 1371B0CS3071A ⑯ Take-up spool 1371B0CS3061A

⑰ Washer XY6-001



II. SHUTTER UNIT

A. Electro-Mechanical Shutter

Shutter speed, both auto and manual, is controlled by electromagnet system. In auto mode, shutter speed automatically and steplessly changes from 8 sec. to 1/1000 sec. depending upon film speed, F number and luminance of the subject. Fourteen different shutter speed, B, 8 sec., to 1/1000 sec., are provided in manual mode.

The following supplies information about minute adjustment only to aid the reader to gain deeper understanding of the shutter mechanism. A shutter as spare parts is factory adjusted, and further adjustment need not be performed.

a. Curtain speed adjustment
The curtain speed is adjusted to 6.0 msec., however, the speed of less than 7.0 msec. is acceptable.
To increase the curtain speed, turn the speed adjust gear clockwise as indicated with arrows. Each teath advancement increases the speed approximately 1.5 msec. See Fig. II-1.

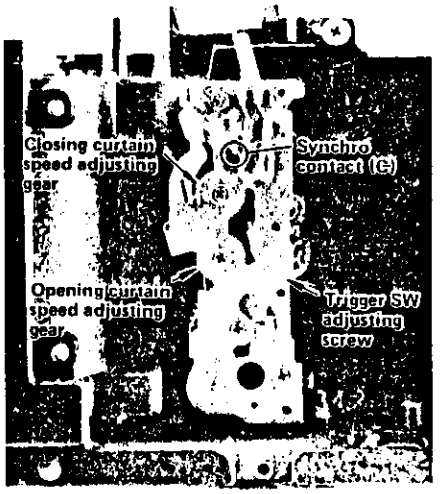

Closing curtain speed adjusting gear
Synchro contact (C)
Opening curtain speed adjusting gear
Trigger SW adjusting screw

Fig. II-1

b. Trigger switch adjustment
After connecting the standard control circuit adjust the eccentric adjustment screw to obtain correct shutter speed at 1/1000 sec. See Fig. II-2.
*When the gap (g-1) is too narrow the shutter speed will be too slow ..... A
*When the gap (g-2) is too wide the shutter speed will be too fast ..... B

Note: The standard control circuit is specially designed to adjust trigger switch contact gap.

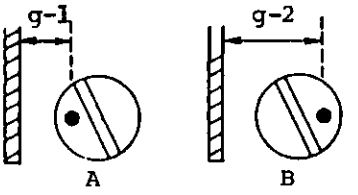


Fig. II-2

c. Synchro contact adjustment
The adjustment is made by bending the contact "C" so that synchronization is made without fault at "X" (1/100 sec.) speed setting. The contact must be free from dust and corrosion.

Synchro time lag
Shutter speed at "X" (1/100 sec.)
A lag 0.35 - 1.15 msec
B lag No less than 2.4 msec
No less than 30MΩwhen DC 500V applied
See fig. II-3

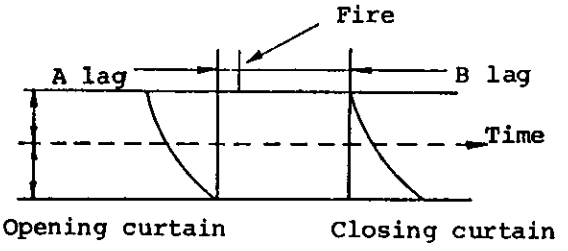


Fig. II-3

B. Shutter Trouble-shooting

Refer to Fig. II-4

DEFECTS	DESCRIPTION	CAUSE
Synchro contact efficiency defective	Less than 50% at 1 msec.	a. Synchro contact dirty b. Worn out contacts
Slow speed unstable	Speed will not change at 1.8 V	a. Magnet dirty b. Armature scratched
Shutter stays open		a. Armature lever spring loose or bent b. P.C. Board defective c. Closing curtain lever spring loose
Closing curtain will not close, or not close filmly		a. Closing curtain lever spring loose
Shutter speed too slow or too fast		For CP-5 shutter speed is controlled electronically, the cause may be found in electronic components and adjustment
Shutter will not charge	Upon winding, curtain trips without shutter release	a. Shutter release lever spring loose
Uneven exposure	"A" and "C" channel shutter speed differ from "B" channel	a. Improper curtain speed (opening and closing curtain speed must be matched). Curtain speed should be less than 7 msec
Curtain dirty	Dusts or finger prints on curtain	a. Wipe of the dust. Use cleaner of thin rubber

1. P.C. board
2. Magnet lead wires
3. Closing curtain release lever
4. Closing curtain release lever spring
5. "X" lever
6. Opening lever claw
7. Curtain actuation lever
8. Opening curtain lever
9. Curtain actuation lever spring
10. Trace of set lever
11. Release lever
12. Upper plate
13. Set lever
14. Rubber stopper
15. Middle plate
16. Armature spring
17. Armature
18. Bulb retainer
19. Closing lever claw center
20. Bulb retainer center
21. Guide post
22. "X" synchro contact
23. Closing lever post
24. Opening lever post
25. Armature center
26. Timing contact center
27. Trigger sw. adjust center
28. Timing contact retainer center
29. Release lever center
30. T1 center
31. T2 center

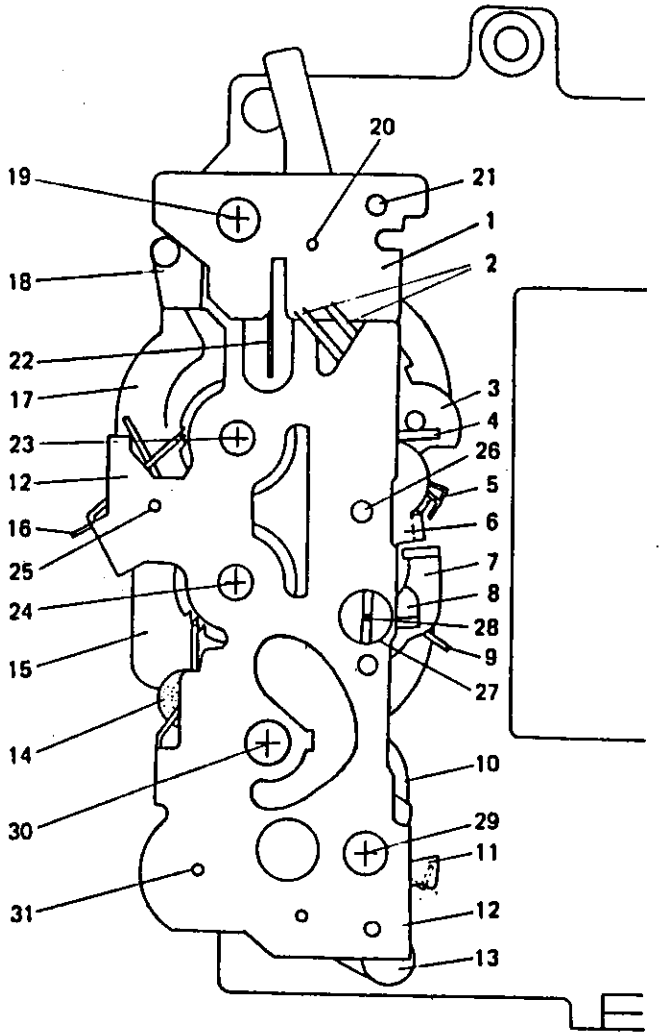


Fig. II-4

III. MIRROR HOUSING UNIT

Mirror Housing

The mirror housing is one of the major components of the camera and it has many important function.
When the shutter release is depressed mirror opens the light path to the shutter.
As this "Mirror up" is completed the mirror housing release a shutter trigger signal.
When the shutter is closed the mirror release lever is actuated and starts "Mirror return".
The housing also consists of lens diaphragm stop-down mechanism.
Moreever, CHINON CP-5 is equiped a new exposure controlled system; it say "Program AE" (automatic exposure).
For new system, the mirror housing is equiped "F-Stop" mechanism.
Further more, the housing vital to the flange back focus and the viewfinder focus.
The focus adjustment procedure will be explained in later.
Each elements of the mirror housing supplied as a spare parts is factory adjusted and further adjustment need not be performed.
The information contained in the elements description is for the extensive repair only.

A. Combination Magnet

General electric magnet works as magnet by magnetizing the iron core of coil with electricity.
However, in case of combination magnet, core itself is a permanent magnet.
Magnetism of both the coil and the permanent magnet negate each other.
Then, the combination magnet lose its magnetism.
By using the principle of this operation, adhere armature lever to combination magnet and extinguish adhesion of both combination magnet and armature lever by electrifying combination magnet.
Then, combination magnet will turned "ON" by shutter release and the armature lever will leave.
So during above operation, F-value is determined, and combination magnet will turned "ON" again.
Then, armature lever will leave again and mirror-up will begin.

B. F Stop Magnet

The CHINON CP-5 camera is designed with a two-stage Program AE Mode and the new AE system is controlled by the Micro-computer perfectly.
The F stop magnet determines the hour of the F stop-down system's activation by the Micro-computer's commond.
When Aperture-priority AE mode and Manual exposure Mode occur, the F stop magnet operates the F stop-down system by constant hour.

C. Mirror Housing Operation

1. Operation of mirror housing charge

Mirror charge lever (137BOCS4006A) will be actuated by the charge lever A (1371BOCS3104A). See Fig. III-1.
The mirror charge lever will be locked by the closing signal lever B (1371BOC-4019A).
The mirror housing is charged completely. See Fig. III-2.

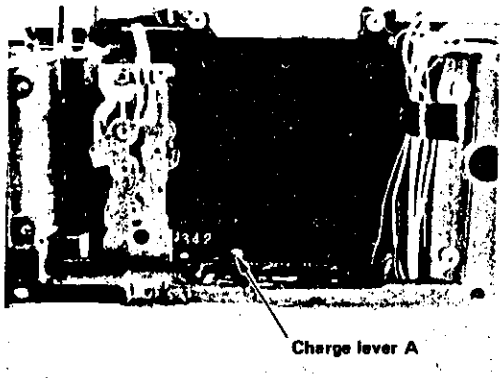


Fig. III-1

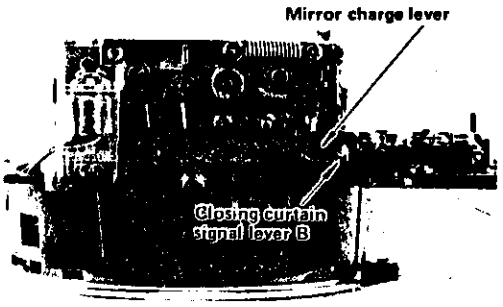


Fig. III-2

2. Operation of the F stop

When the combination magnet (1171BOC-EZ01A) is turned "ON", the armature lever (1371BOCS4007A) will be released from the combination magnet and push the start hook lever (1371BOCS4010A). See Fig. III-3.

Then, the slide plate (1371BOCS4013A) runs and the F start lever (1371BOC-4144A) is pushed by the F stop-down lever C (1371BOCS4034A).
At the same time, the F armature reset lever (1371BOC-4143A) pushes the mirror hook lever B (1371BOCS4016A). See Fig. III-4.

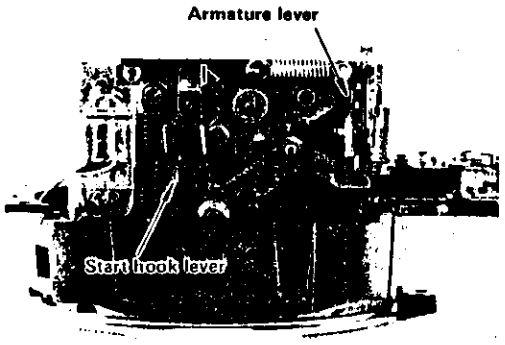


Fig. III-3

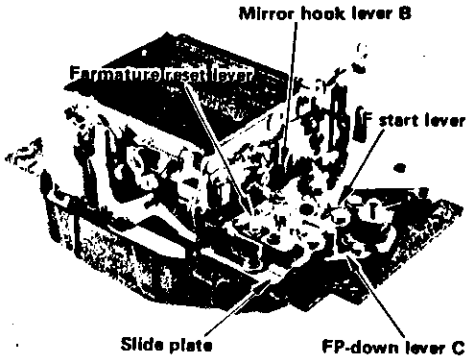


Fig. III-4

The F stop magnet (1371BOC-EZ01A) is turned "ON" the moment that the shutter is released and the F armature lever (1371BOC-4142A) will be leaved.
See Fig. III-5.

Then, the F ratchet (1371BOCS4039A) is absolved by the ratchet claw.
So the F stop-down lever A (1371BOCS4032A) moves the F value position through the F stop-down gear and F stop-down lever operation. See Fig. III-6.

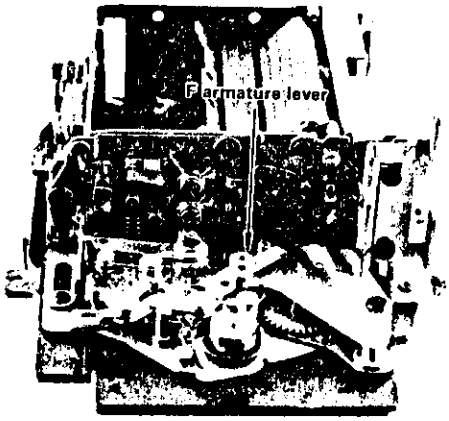


Fig. III-5

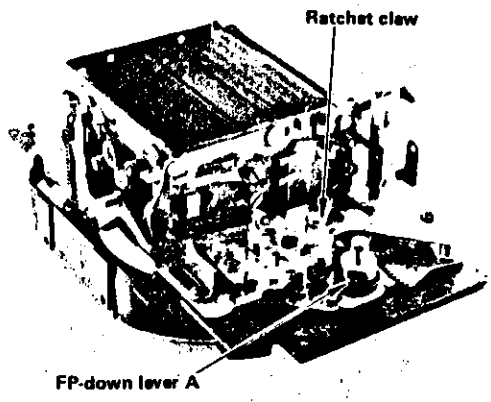


Fig. III-6

3. Operation of mirror-up

When the combination magnet is turned "ON" again, the armature lever will be released from the combination magnet and push the start hook lever.
Then, the lock of the mirror hook lever A (1371BOCS4015A) will be released.
See Fig. III-7.

Then, the mirror lever (1371BOCS4014A) lifts up the mirror system, and as a result, the mirror hook lever A is absolved.
The mirror-up operation will come to an end.
Also the shutter release lever (1371BOC-4017A) and shutter function are sequenced to actuate the opening curtain lever. See Fig. III-8.

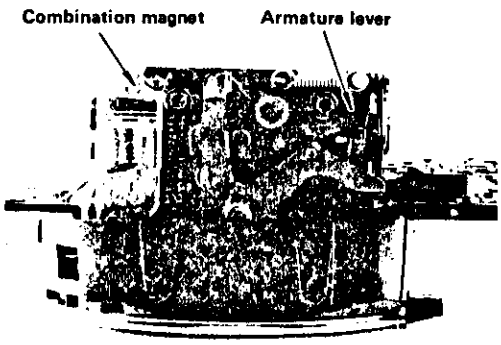


Fig. III-7

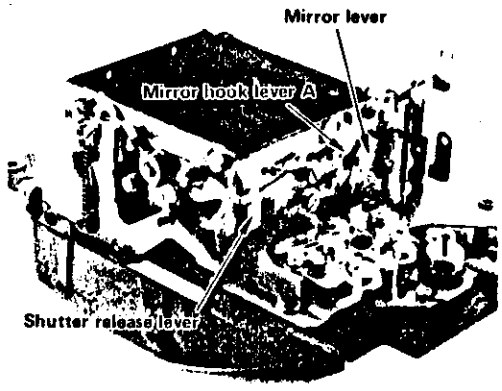


Fig. III-8

4. Operation of mirror-down

The shutter's closing curtain release lever presses the closing curtain signal lever A (1371BOC-4018A) there by actuating the closing curtain signal levers A and B in sequence.
The mirror charge lever should be released from the closing curtain signal lever B. See Fig. III-9.

Also the housing will return the first position, when it will be finished all of the operations (mirror charge, F stop, mirror-up and mirror-down).

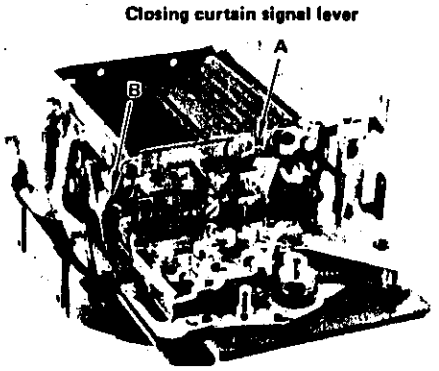


Fig. III-9

IV. WINDING MECHANISM

A. Operation of Winding Mechanism

The charge lever A (1371BOCS3104A) and charge lever B (1371BOCS3111A) should be connected with stop cam (0971BOCU3102A). See Fig. IV-1.

The charge lever pin A on the charge lever A actuated with the mirror charge lever (1371BOCS4006A) and the charge pin B on the charge lever B actuated with the set lever of shutter.
By winding, the charge lever A should be charged by the mirror housing and charge lever B should be charged by the shutter. See Fig. IV-2.

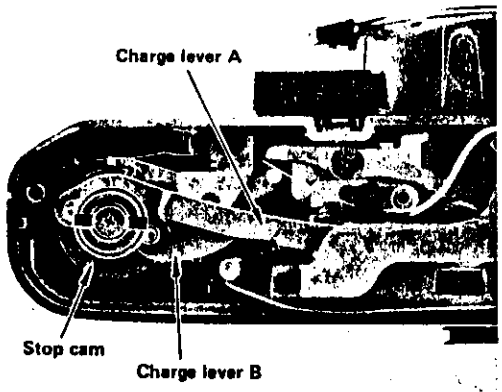


Fig. IV-1

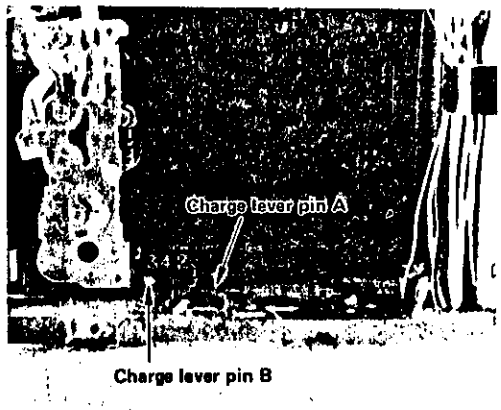


Fig. IV-2

By charging the mirror housing, the mirror the charge lever pin (on the mirror charge lever) will move and it should be connected with the transmission lever.

The transmission lever will be released from the stop lever (0971BOCU3085B) and the stop lever contacts on the circumfelence of the stop cam with the stop lever spring (0971BOC-3088A).

When winded the camera completely and returned the stop cam, the stop lever will be hooked with the stop cam hook. When the closing curtain is started, the charge lever pin will return. The transmission lever will return with spring and it push the stop lever. Now hook is released. See Fig. IV-3.

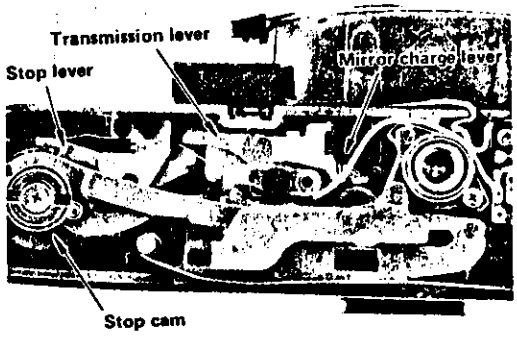


Fig. IV-3

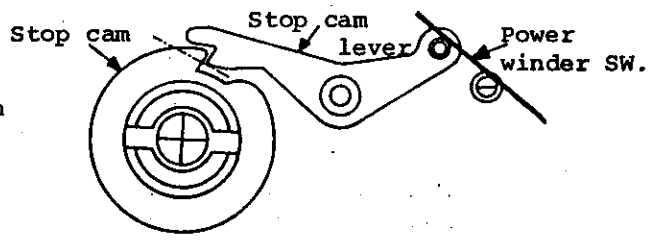


Fig. IV-4

B. Power Winder Switch

The mounting of the winder to the camera must be done without difficulty all of connector contacts should be free from dust or corrosion. Resistance: Less than 10Ω.

Adjust the contact gap by bending so that the winder switch shall be closed when the stop cam lever is positioned on the center of the stop cam hook. See Fig. IV-4.

V. FOCUS ADJUSTMENT

To the quality of the picture produced by at SLR camera, two focus adjustment is vital (excluding lens focus). One is called the "Flange Back Focus" and the other is called the "Viewfinder Focus".
The flange back focus is the distance between the lens mount hardware surface and the film plane. The distance should be correctly adjusted in order to focus clearly with any kind of interchangeable lenses. Improper adjustment of this focus will affect the viewfinder focus , too.
The viewfinder focus must be adjusted correctly so that film plane image precisely coinside. If this poorly adjusted, whenever focused through the viewfinder, the results on the film will be out focus in actual picture taking. See Fig. V-1.

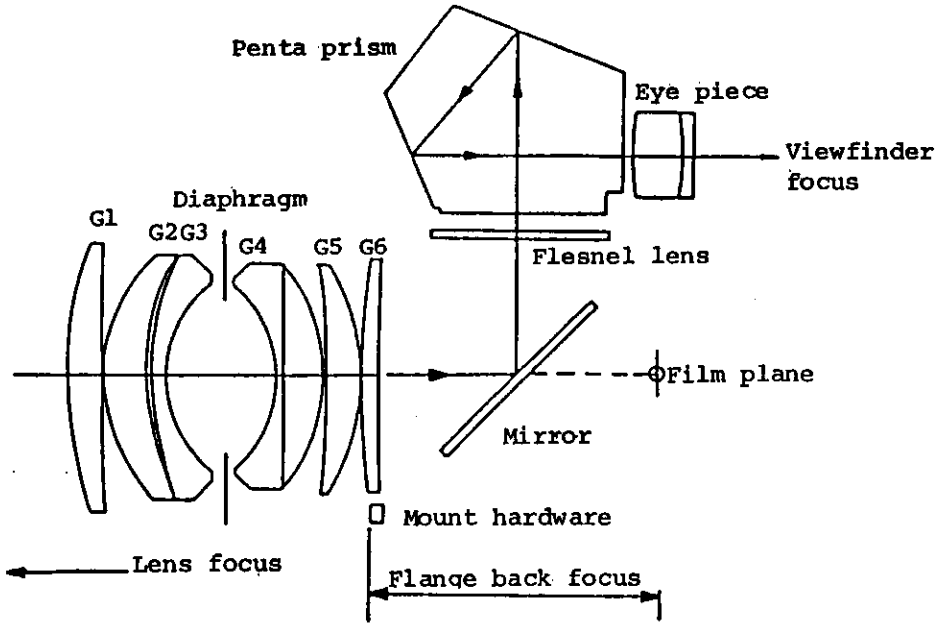


Fig. V-1

A. Flange Back Check and Adjustment

Tools Used: Dial gauge (T2-202)

a. Place the camera on a dial gauge (T2-202) and insert a block gauge between the camera and dial gauge. Rotate the camera. See Fig. V-2.
The dial gauge reading should be:
55.5 $^{-0.01}_{-0.04}$ mm (45.5 $^{-0.01}_{-0.04}$ mm + Block gauge 10.0 mm)

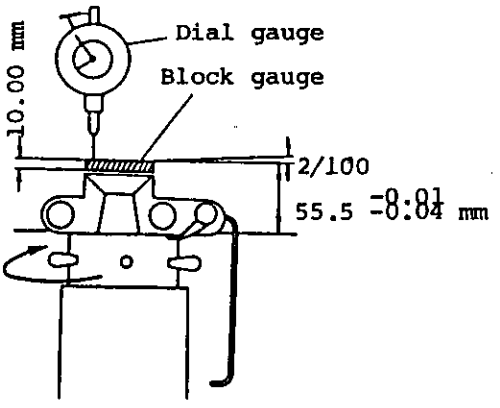


Fig. V-2

b. The reading should not fluctuate more than 0.02 mm even it is within the specified range.
When adjustment is necessary, loosen the six set screws of the mount and insert or with draw the mount washers.
Three kinds of washers are available: 0.03, 0.05, 0.07 mm.
Tighten the six set screws securely after the adjustment.
See Fig. V-3.

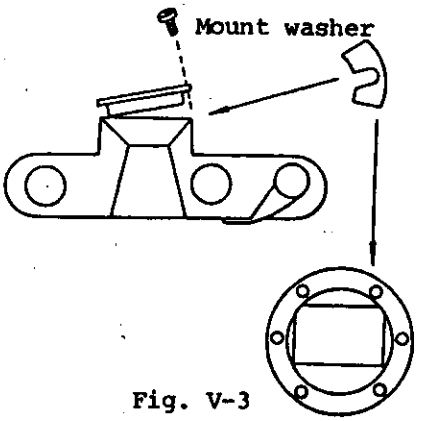


Fig. V-3

B. Viewfinder Focus Adjustment

Tools used: Infinity collimator (T0-005)
Focus calibrated lens (f=50 mm lens)

a. Mount the lens to the body and turn the lens focusing ring to obtain sharpest collimator image on the viewfinder screen.
If the collimator is not available aim at a distant object more than 250 m away (with f=50 mm lens).

b. When the sharpest image is obtained at near distance side of the focus ring, turn the three adjustment screws clockwise.

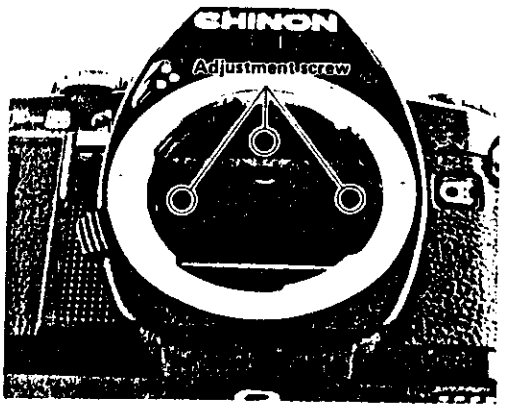


Fig. V-4

c. When the sharpest image is not obtained even at "∞" position, turn the three adjustment screws counterclockwise.
See Fig. V-4.

d. The image should be sharpest at the focus ring at "∞" position.
After the adjustment, release the shutter several times and check focus again.

e. After adjustment, lock these screw with glue.

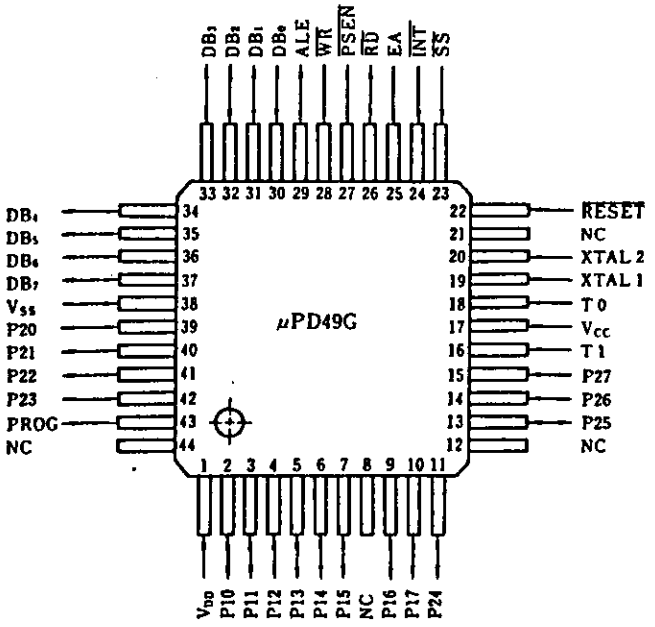
VI. CIRCUIT DESCRIPTION

A. Function of Micro-Computer (μPD49G)

Name of terminal

P10 - P17	:	Input/Output (PORT1)
P20 - P27	:	Input/Output (PORT2)
DB0 - DB7	:	Data Bus
T0 , T1	:	Test
$\overline{INT}$	:	Interrupt
$\overline{RD}$	:	Read
$\overline{WR}$	:	Write
ALE	:	Address Latch Enable
$\overline{PSEN}$	:	Program Store Enable
$\overline{RESET}$	:	Reset
$\overline{SS}$	:	Single Step
EA	:	External Access
XTAL 1, 2	:	Xtal (Crystal) Input
VDD	:	Stand-By Control

Connection Diagram (Top View)

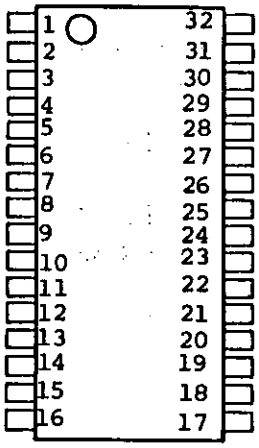


Pin No.	Name of terminals		Functions
1	VDD		5.0 V - 5.6 V
2 - 10	P10 - P17	P12(4)	S2 SW. : "ON" at Low level, "OFF" at High level
		P13(5)	Self SW. : "ON" at Low level, "OFF" at High level
		P14(6)	Mode SW. : Gray code
		P15(7)	Mode SW. : Gray code
		P16(9)	Mode SW. : Gray code
		P17(10)	Manual SW. : "ON" at Low level, "OFF" at High level
11 - 15	P24 - P27	P24(11)	LED's Anode drive : UNDER, 1, 1/15, 1/250
		P25(13)	: 8, 1/2, 1/30, 1/500
		P26(14)	: 4, 1/4, 1/60, 1/1000
		P27(15)	: 2, 1/2, 1/125, OVER
16	T1		Trigger SW. : To picture sequence, when Trigger SW. at Low level.
17	VCC		5.0 V - 5.6 V
18	T0		Winding and AF OK : Winding completion to High level, AF OK to High level
19	XTAL 1		6 MHz ± 0.3 %
20	XTAL 2		6 MHz ± 0.3 %
22	$\overline{RESET}$		Micro-computer is reset condition (stop condition) at Low.

24	$\overline{INT}$	Sl SW. : "ON" at Low level, "OFF" at High level
30	DB0	CS (Chip Select) Reference : uPD7001C
31	DB1	SCK (Serial Clock)
32	DB2	Cathode of Program LED (GREEN)
33	DB3	Power lock : power hold at Low
34	DB4	Cathode side drive of Buzzer and Self LED
35	DB5	F stop magnet drive and Auto date drive, Self LED Anode side drive : F stop magnet "ON" at Low level, when DB4 at High level and DB5 at Low level Self LED goes "ON"
36	DB6	Shutter magnet drive : Shutter magnet "ON" at High
37	DB7	Combination magnet drive and Auto date drive drive : Combination magnet "ON" at Low, when DB5 and DB7 at Low. Auto date is printed.
39	P20	LED's Cathode drive : OVER, 1/1000, 1/500, 1/250
40	P21	: 1/125, 1/60, 1/30, 1/15
41	P22	: 1/8, 1/4, 1/2, 1
42	P24	: 2, 4, 8, UNDER

B. Function of Bipolar Analog IC (MSA421RS)

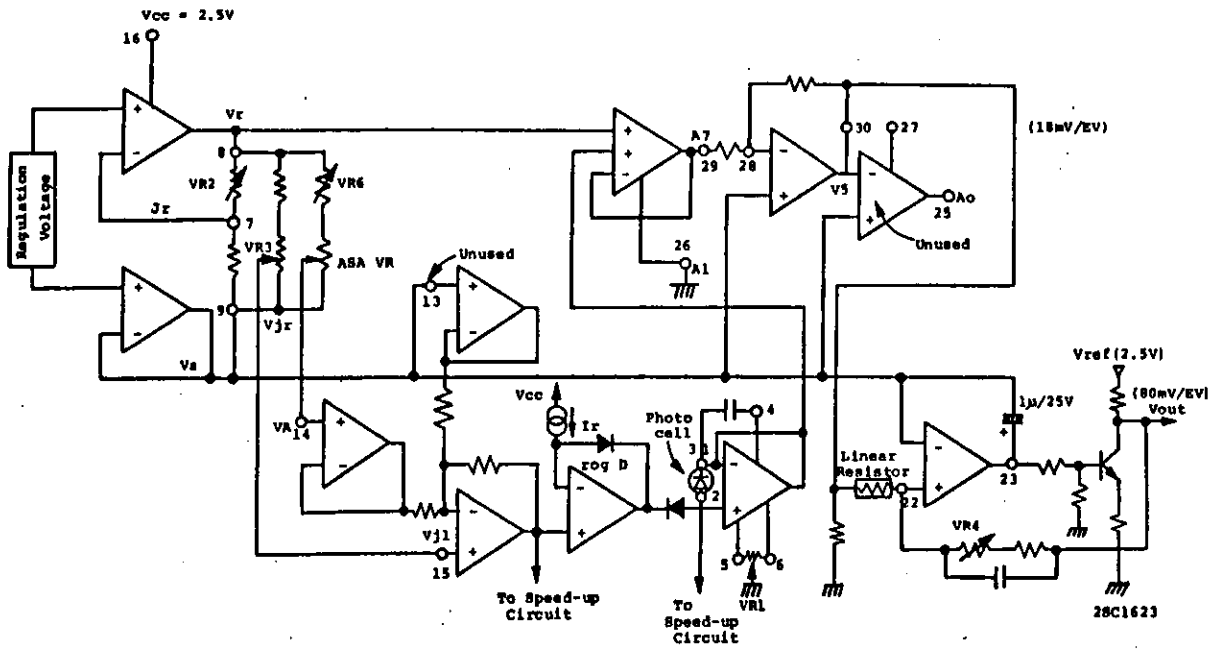
Connection Diagran (Top View)



Pin NO.	Name of terminals	Functions
1	A3-IN	MOS TOP Ope.-Amp-Input : Connection to Cathode at SPD
2	A3+IN	MOS TOP Ope.-Amp+Input : Connection to Anode at SPD
3	A3-IN	Same as Pin 1
4	A3 Comp	Phase compensational C Input

5	A3 OFF-SET ADJ	OFF- SET adjust connection for MOS TOP Ope.-Amp.
6	A3 OFF-SET ADJ	Same as Pin 5
7	Jr	Vrs Adjustment Input
8	Vr OUT	Reference Voltage (Vr) Output
9	Vs OUT	Reference Voltage (Vs) Output
10 - 12	NC	No connection
14	VA	Film speed (ASA/ISO) Input
15	VJ1	Level Adjustment Input
16	VCC	Power source + Input
18 - 20	NC	No connection
24	C2	To speed-up circuit connect
28	A5-IN	A5 Amp. Input
29	A7 OUT	A7 Amp. Output
30	A5 OUT	A5 Amp. Output
31	C2	To speed-up circuit connect
32	GND	Power source - Input

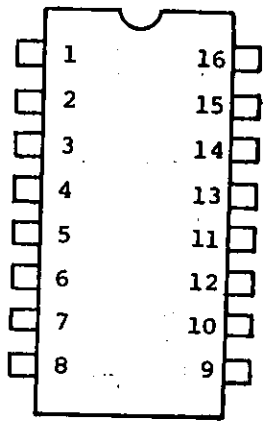
MSA421RS Equivalence Circuit



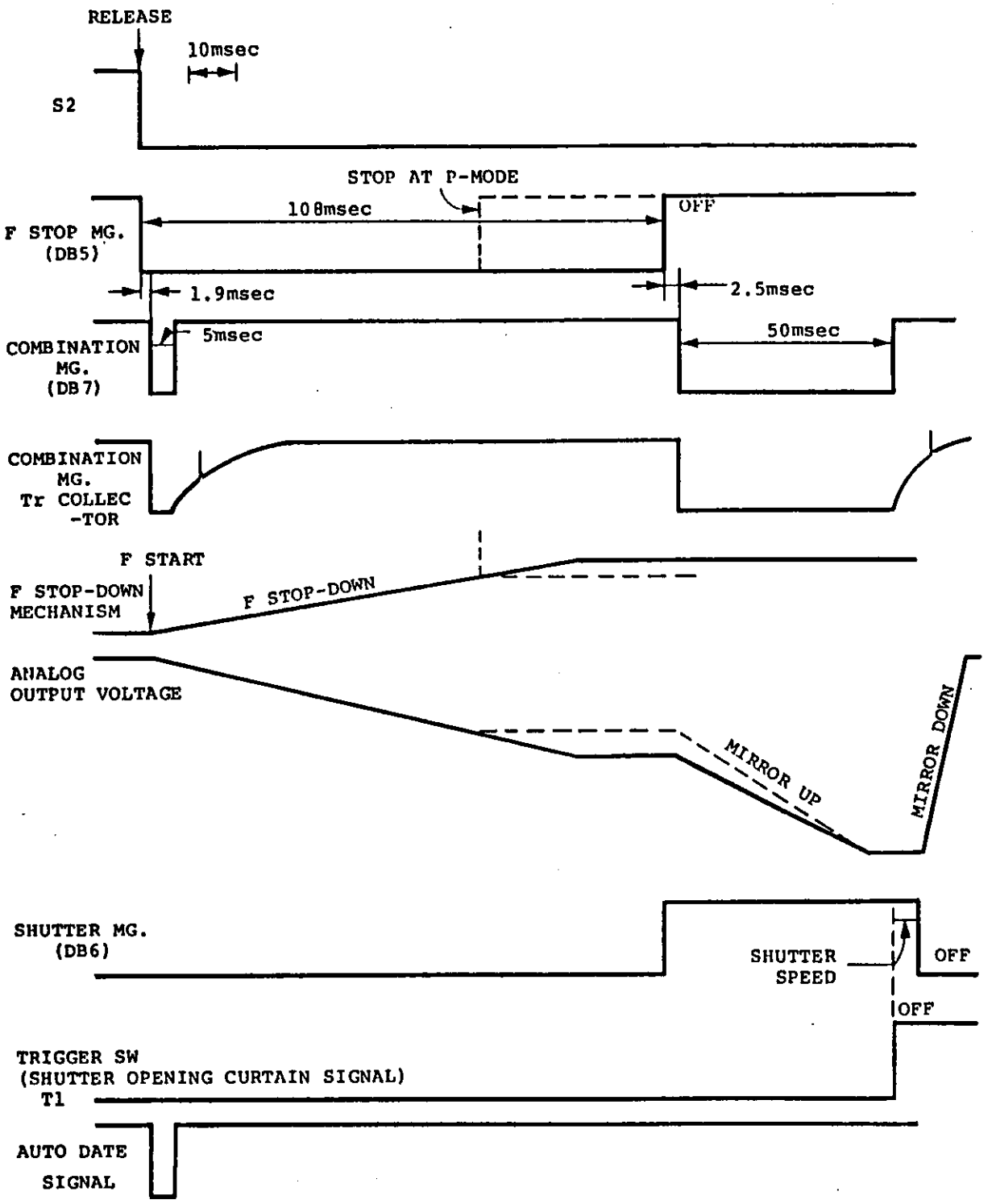
C. Function of MOS Digital IC (μPD7001C) for A/D Converter

Pin No.	Name of terminals		
1	$\overline{EOC}$	:	End of convert
2	DL	:	Date Latch
3	SI	:	Serial Input
4	$\overline{SCK}$	:	Serial Clock
5	SO	:	Serial Output
6	$\overline{CS}$	:	Chip Select
7	CL0	:	Clock
8	CL1	:	Clock
9	VSS	:	GND
10	A0	:	Analog Input
11	A1	:	Analog Input
12	A2	:	Analog Input
13	A3	:	Analog Input
14		:	Analog GND
15	VREF	:	Reference Voltage Input
16	VDD	:	Power source

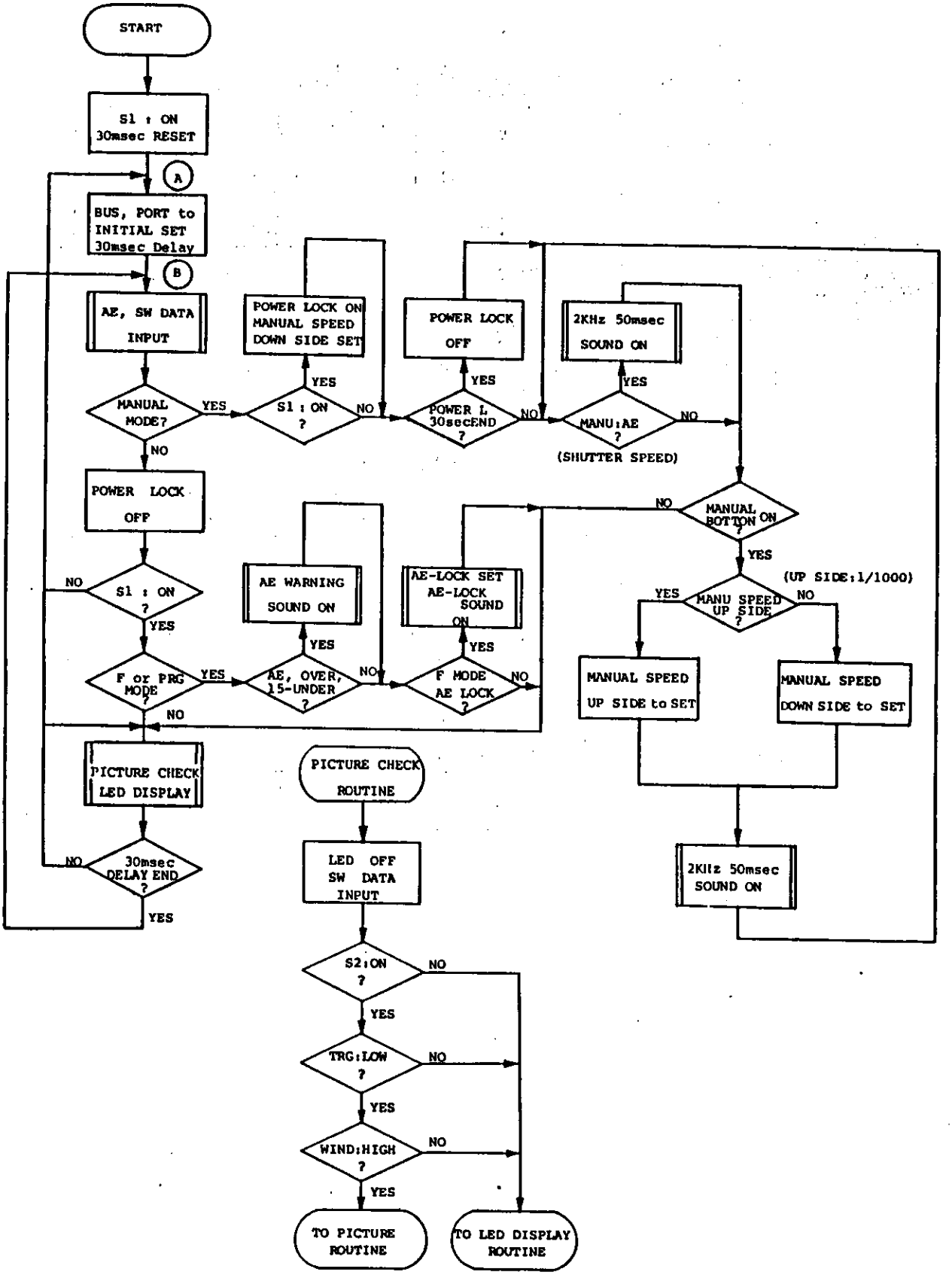
Connection Diagram (Top View)

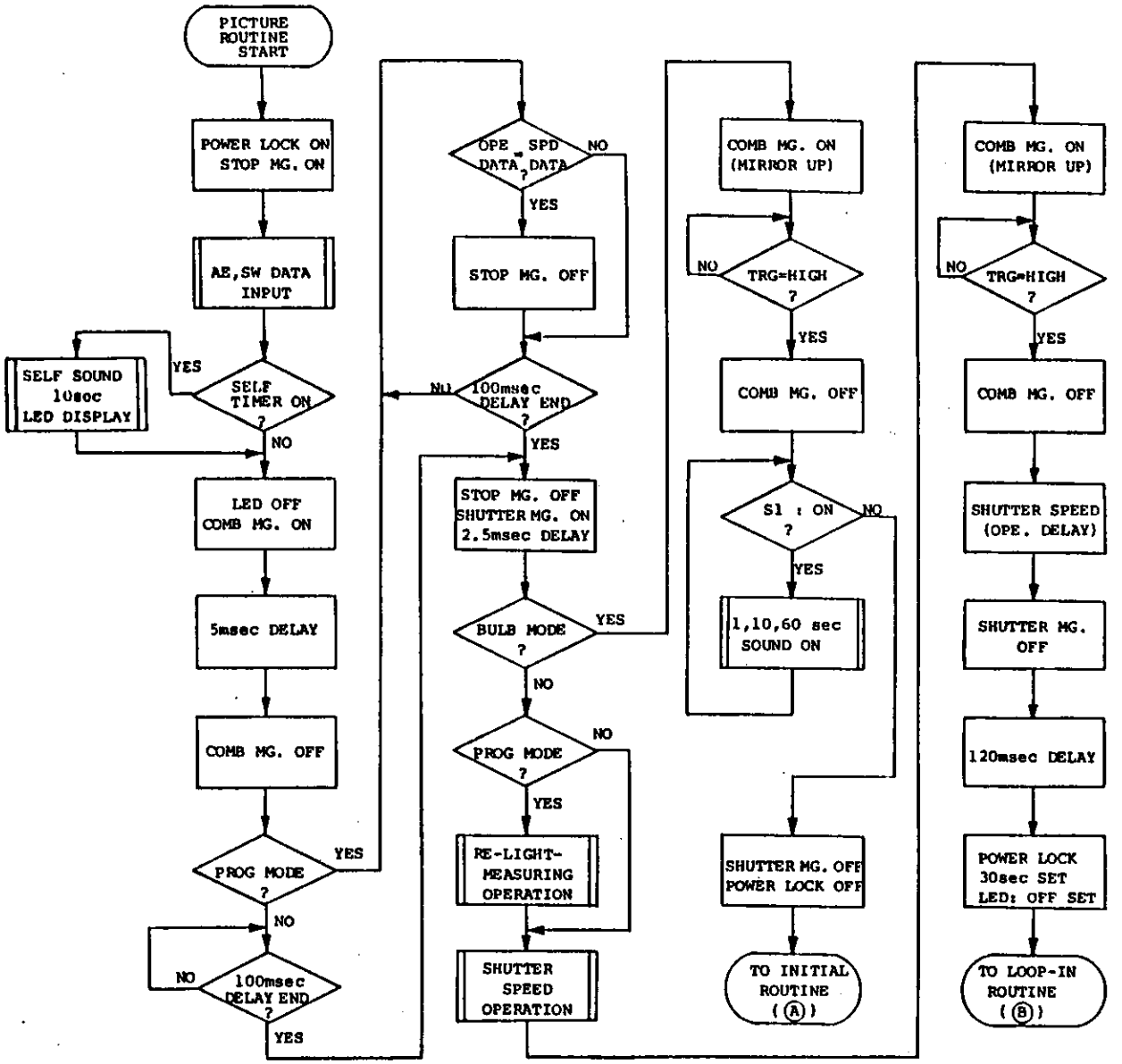


D. Timing Chart



E. General Flow Chart




PICTURE ROUTINE START
POWER LOCK ON STOP MG. ON
AE,SW DATA INPUT
SELF TIMER ON ?
YES
SELF SOUND 10sec LED DISPLAY
NO
LED OFF COMB MG. ON
5msec DELAY
COMB MG. OFF
PROG MODE ?
YES
NO
100msec DELAY END ?
NO
YES
OPE SPD DATA = DATA ?
NO
YES
STOP MG. OFF
100msec DELAY END ?
NO
YES
STOP MG. OFF SHUTTER MG. ON 2.5msec DELAY
BULB MODE ?
YES
NO
PROG MODE ?
NO
YES
RE-LIGHT-MEASURING OPERATION
SHUTTER SPEED OPERATION
COMB MG. ON (MIRROR UP)
NO
TRG=HIGH ?
YES
COMB MG. OFF
S1 : ON ?
NO
YES
1,10,60 sec SOUND ON
SHUTTER MG. OFF POWER LOCK OFF
TO INITIAL ROUTINE (Ⓐ)
COMB MG. ON (MIRROR UP)
NO
TRG=HIGH ?
YES
COMB MG. OFF
SHUTTER SPEED (OPE. DELAY)
SHUTTER MG. OFF
120msec DELAY
POWER LOCK 30sec SET LED: OFF SET
TO LOOP-IN ROUTINE (Ⓑ)

VII. EXPOSURE CONTROL

The CHINON CP-5 features Two-stage Program automatic exposure controlled system. Once the lens F stop is set to F/22 (50mm F/1.4 lens), the shutter speed and F stop are automatically calculated and controlled for the correct exposure.
Most of the controlling circuit is integrated into the Micro-computer.

A. Manual Shutter Speed Confirm

Tools used: DC power source (T0-057)
Shutter speed tester (T0-064)

1. Connect the DC connector to camera and set the power supply voltage to 4.0 ±0.2 V.

2. Check the manual shutter speed with the shutter speed tester, so that the reading becomes within nominal ±0.3 EV without 1/1000 sec.

Shutter Speed (msec.)

EV / Speed	-0.3EV	Nominal	+0.3EV
1/500	1.58	1.95	2.40
1/250	3.18	3.91	4.81
1/125	6.34	7.81	9.62
1/60	12.7	15.6	19.2
1/30	25.4	31.3	38.5
1/15	50.8	62.5	77.0
1/8	102	125	154
1/4	203	250	308
1/2	406	500	616
1	812	1000	1231
2	1625	2000	2642
4	3449	4000	4925
8	6898	8000	9850

The 1/1000 sec., so that the reading becomes within nominal ±0.4 EV.
(-0.4 EV: 0.37 msec., nominal: 0.49 msec., +0.4 EV: 0.65 msec.)

B. Automatic Shutter Speed Adjustment

1. Connect the DC connector to camera and set the power supply voltage to 4.0 ±0.2 V.

2. Off-set Adjustment for SPD Input-Ope.-Amp.

   a. Connect the voltmeter to TP-1 (MSA421 Pin 1) and TP-2 (MSA421 Pin 2).

   b. Adjust the potentiometer VR1 (100KΩ) so that the voltage of between TP-1 and TP-2 becomes as belows.
   V(1-2) = 0 ±0.001 V [with 50mm F/1.4 lens, LV = 15]

   See Fig. VII-1, 2.

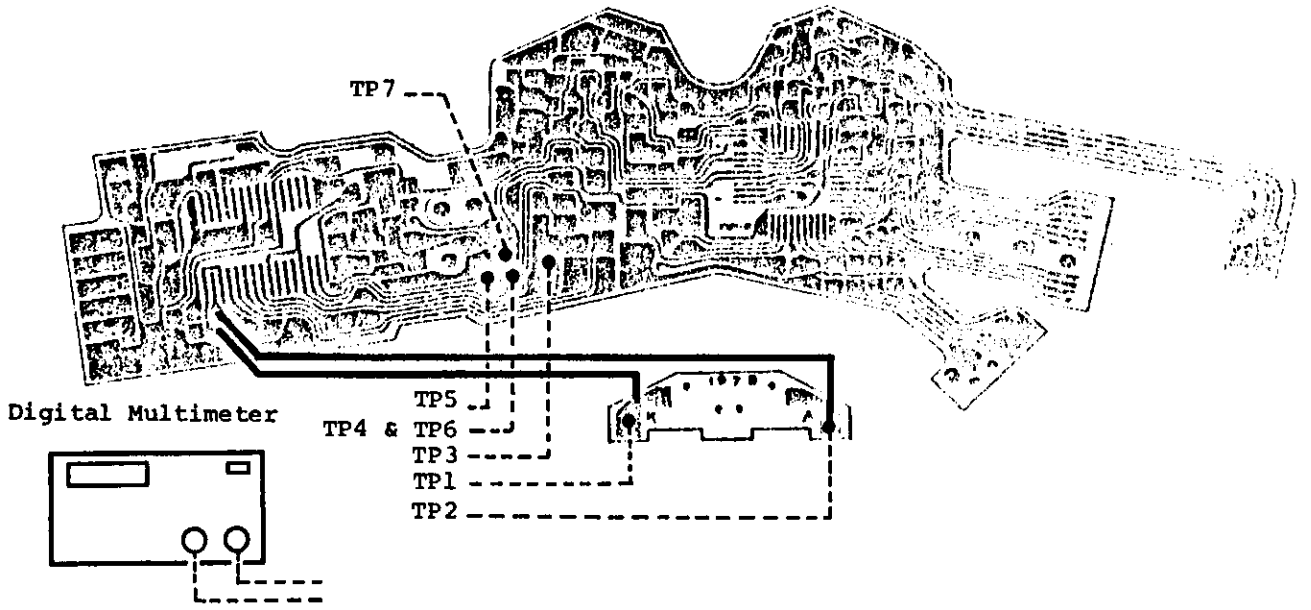


Fig. VII-1

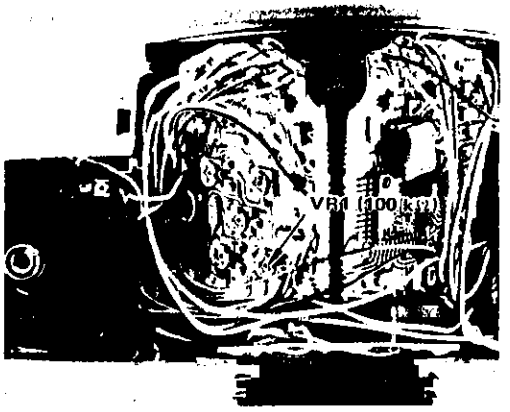


Fig. VII-2

3. Regulation Voltage (Vrs) Adjustment

a. Connect the multimeter to TP-3 (MSA 421 Pin 8) and TP-4 (MSA421 Pin 9), and adjust the potentiometer VR2 (22KΩ) so that the voltage of between TP-3 and TP-4 becomes as belows. Vrs = 288 mV ±3.6 mV (18 mV/EV x 16 steps)
See Fig. VII-3.

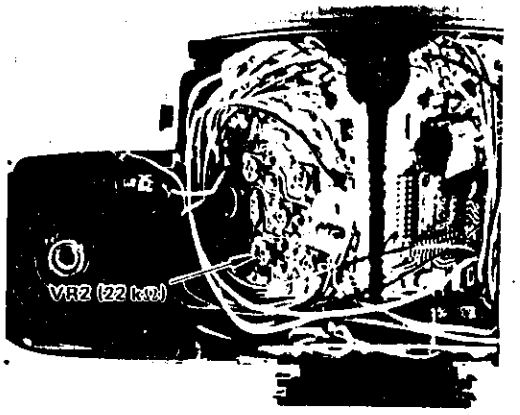


Fig. VII-3

4. γ Adjustment of ASA VR (VA)

a. Set the ASA ring to ASA 25. Then, connect the voltmeter to TP-4 (MSA421 Pin 9) and TP-5 (MSA421 Pin 14), and adjust the potentiometer VR6 (47KΩ) finely, so that the voltage of between TP-4 and TP-5 becomes as belows.
VA(25) = 126 mV ±3.6 mV (18 mV/EV x 7steps)

See Fig. VII-1, 4.

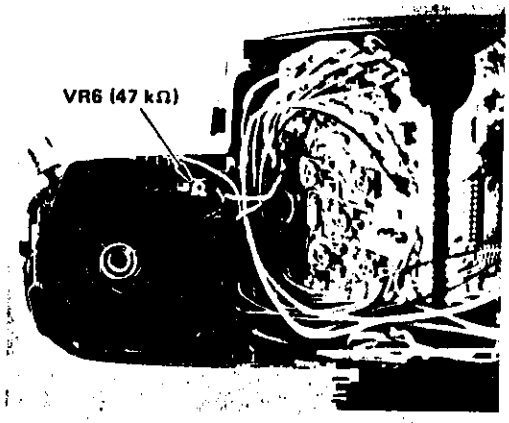


Fig. VII-4

5. γ Adjustment of F/No. VR (VF)

a. Connect the voltmeter to TP-6 (MSA421 Pin 13) and TP-7 (MSA421 Pin 32:GND), and check the voltage at F/2.

b. After check the voltage, turn the diaphragm ring to F/22 and adjust the potentiometer VR5 (47KΩ) so that the voltmeter reading becomes as belows.
VF(22) = VF(2) + 560 mV ±10 mV (80 mV/EV x 7steps) [with 50mm F/1.4 lens]

See Fig. VII-1, 5.

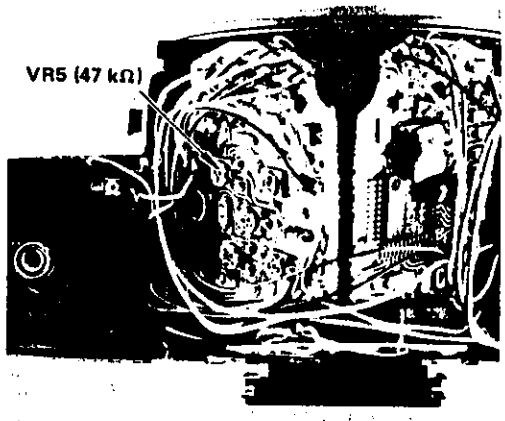


Fig. VII-5

6. A/D Compensational Adjustment (with EE camera tester)

a. Level adjustment of A/D compensator
Adjusting conditions:
Light source: LV 6 Film speed: ASA/ISO 100 F number: F/5.6
Exposure mode: Auto

Adjust the potentiometer VR3 (22KΩ) so that the filmplane exposure is within the range of nominal ± 0.15 EV. See Fig. VII-6.

Shutter Speed (msec.)

-0.15EV	0EV	+0.15EV	LED Indicator
450	500	555	1/2 sec.

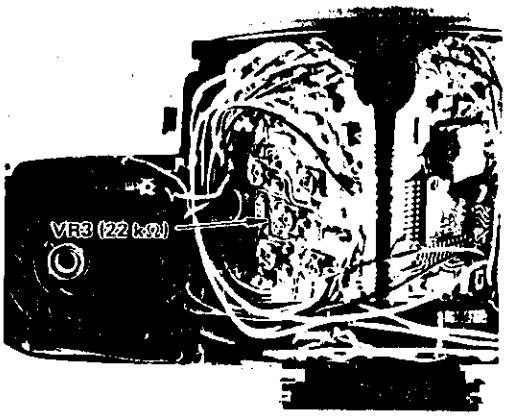
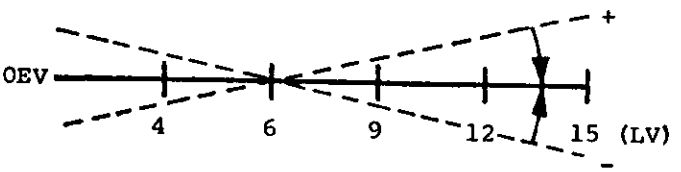


Fig. VII-6

b. γ Adjustment of A/D compensator
Adjusting conditions:
Film speed: ASA/ISO 100
F number: F/5.6
Exposure mode: Auto



Check the AE at each light source of LV 15, 12, 9 and 4.
When the EV on the image is rights illustrated, it can be adjusted finely with the potentiometer VR4 (22KΩ). See Fig. VII-7
EV at each light source = within nominal ± 0.2 EV

Shutter Speed (msec.)

LV	-0.2EV	0EV	+0.2EV	LED Indicator
15	0.85	0.98	1.12	1/1000 sec.
12	6.80	7.81	8.97	1/125 sec.
9	54.4	62.5	71.8	1/15 sec.
6	435	500	574	1/2 sec.
4	1741	2000	2297	2 sec.

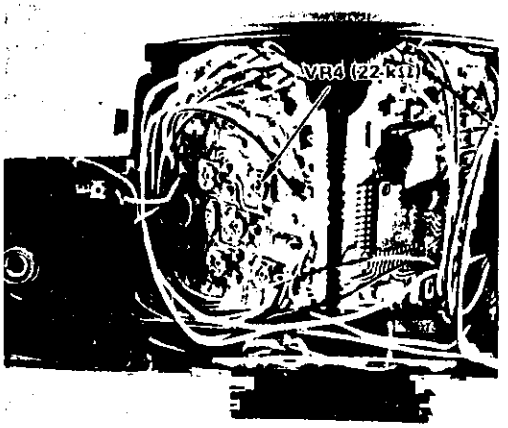
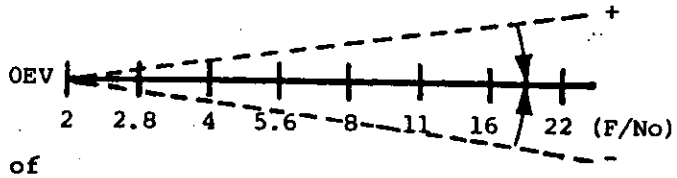


Fig. VII-7

7. F/No Compensational Confirm

Confirming conditions:
Light source: LV 9
Film speed: ASA/ISO 100
Exposure mode: Auto



Check the AE at each F number.
If the EV is not within the range of nominal ± 0.2 EV, it can be readjusted finely with potentiometer VR5 (47KΩ).
Reference: B.5

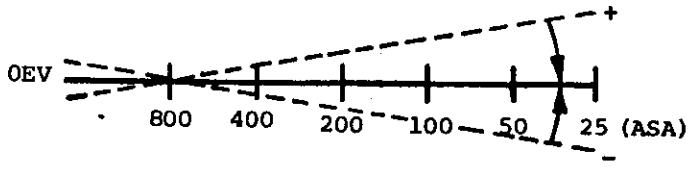
Shutter Speed (msec.)

F/No	-0.2EV	0EV	+0.2EV	LED Indicator
2	0.85	0.98	1.12	1/1000 sec.
5.6	6.80	7.81	8.97	1/125 sec.
16	54.4	62.5	71.8	1/15 sec.
22	109	125	144	1/8 sec.

This time, A/D level changes, too.
It is necessary, it can be readjusted with potentiometer VR3 (22K).
(τ is not changeable.)
Reference: B.6.a

8. ASA Compensational Confirm

Confirming conditions:
Light source: LV 9
F number: F/5.6
Exposure mode: Auto



Check the AE at each film speed.
If the EV is not within the range of nominal ± 0.2 EV, it can be readjusted finely with potentiometer VR6 (47KΩ)
Reference: B.4

This time, A/D level changes, too.
It is necessary, it can be readjusted with potentiometer VR3 (22KΩ).
Reference: B.6.a

Shutter Speed (msec.)

ASA	-0.2EV	0EV	+0.2EV	LED Indicator
800	0.85	0.98	1.12	1/1000 sec.
400	1.70	1.95	2.24	1/500 sec.
200	3.40	3.91	4.48	1/250 sec.
100	6.80	7.81	8.97	1/125 sec.
50	13.6	15.6	17.9	1/60 sec.
25	27.2	31.3	35.8	1/30 sec.

9. Final Confirmation of AE

Checking conditions:
Light source: LV 9 Film speed: ASA/ISO 100 F number: F/5.6
Exposure mode: Auto

Check the AE so that the reading becomes within nominal ± 0.15 EV.
If it is not correctly, readjust the AE level by potentiometer VR3 (22kΩ).
Reference: B.6.a

Then, change the light source, F number and film speed, confirm the AE so that the reading becomes within ± 0.3 EV in the range of interlocked operation.
If it is not correctly, repeat from procedures B.6, 7 and 8.

At ASA/ISO 100, F/5.6

LV	-0.3EV	0EV	+0.3EV	LED Indicator
15	0.79	0.98	1.20	1/1000 sec.
12	6.35	7.81	9.62	1/125 sec.
9		62.5		1/15 sec.
6	406	500	616	1/2 sec.
4	1625	2000	2462	2 sec.

At LV 9, ASA/ISO 100

F/No.	-0.3EV	0EV	+0.3EV	LED Indicator
2	6.35	7.81	9.62	1/125 sec.
4	25.4	31.3	38.5	1/30 sec.
5.6		62.5		1/15 sec.
16	406	500	616	1/2 sec.
22	812	1000	1231	1 sec.

At LV 9, F/5.6

ASA	-0.3EV	0EV	+0.3EV	LED Indicator
3200	1.59	1.95	2.40	1/500 sec.
800	6.35	7.81	9.62	1/125 sec.
400	12.7	15.6	19.2	1/60 sec.
100		62.5		1/15 sec.
25	203	250	308	1/4 sec.

C. Confirm the Program AE

Checking conditions:
F number: F/22 (with 50mm F/1.4 lens) Film speed: ASA/ISO 100
Exposure mode: Program 1 and 2

Change the light source (LV 4, 6, 9, 12 and 15), confirm the AE so that the reading becomes within ± 0.5 EV in the range of interlocked operation.
If it is not correctly, repeat from B.6, 7, 8 and 9.

D. Adjustment of Battery Checker Voltage

1. Set the power supply voltage to 3.0 V and the Exposure mode selector to " A " or " P ".

2. Adjust the potentiometer VR7 (10KΩ) so that the shutter speed indication LED's should be turned ON/OFF within 3.0 ±0.1 V, when the S1 is switched ON/OFF by shutter release button.

3. After adjustment, confirm that the shutter speed indication LED's goes out at power supply voltage 2.2 ±0.1 V and switch S1 "ON".

See Fig. VII-8

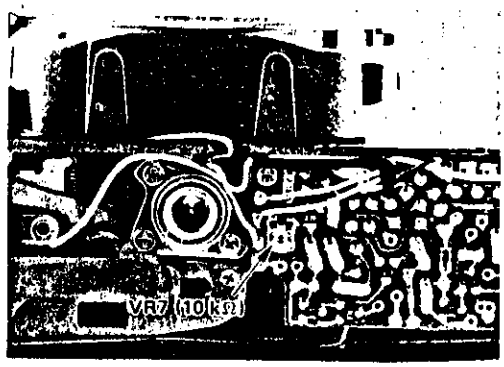


Fig. VII-8

E. Light Value

LV	cd/m^2	R.LUX
4	2.24	7.0
5	4.48	14.0
6	9.95	28.0
7	17.90	56.2
8	35.81	112.5
9	71.62	225.0
10	143.24	450.0
11	286.47	900.0
12	572.95	1800.5
13	1145.90	3599.9
14	2291.79	7199.9
15	4583.59	14399.8

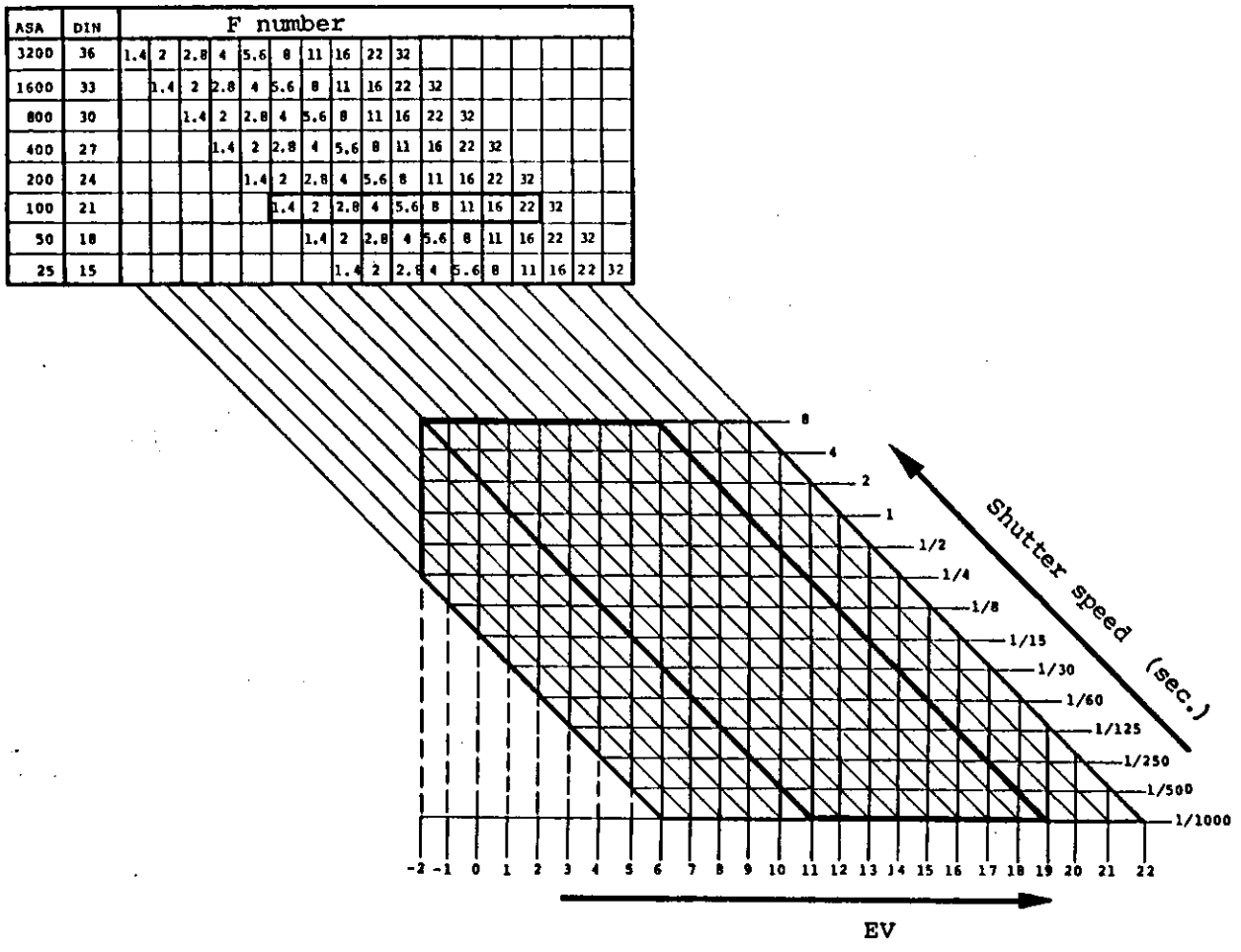
The table right gives cross reference of light intensity required for testing and adjusting the CHINON CP-5.

Conditions:
Film speed: ASA/ISO 100
K value: 1.3

F. EV Chart

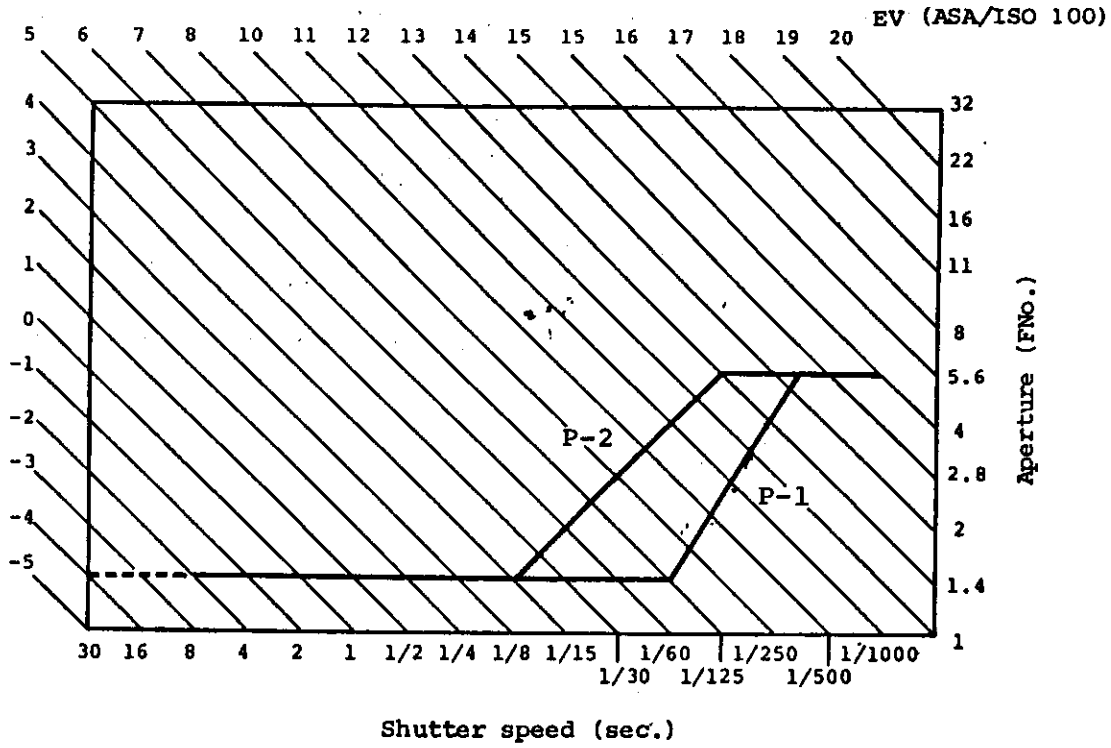
The longitudinal lines represent the values of EV; the horizontal lines, shutter speeds and the standing lines, F numbers.
Each point where the three lines intersect with one another explains the relationship between the shutter speed, the EV value and the F number.
The area outlined by heavy line indicates the range in which the interlocked operation is perfomed for measurement of the intensity of light when an F/1.4 lens is used for a film with the sensitivity of ASA/ISO 100.

ASA	DIN	F number															
3200	36	1.4	2	2.8	4	5.6	8	11	16	22	32						
1600	33		1.4	2	2.8	4	5.6	8	11	16	22	32					
800	30			1.4	2	2.8	4	5.6	8	11	16	22	32				
400	27				1.4	2	2.8	4	5.6	8	11	16	22	32			
200	24					1.4	2	2.8	4	5.6	8	11	16	22	32		
100	21						1.4	2	2.8	4	5.6	8	11	16	22	32	
50	18							1.4	2	2.8	4	5.6	8	11	16	22	32
25	15								1.4	2	2.8	4	5.6	8	11	16	22	32



G. Program Curve

Program 1 or 2 (With 50mm f/1.4 lens, its aperture set at 5.6)

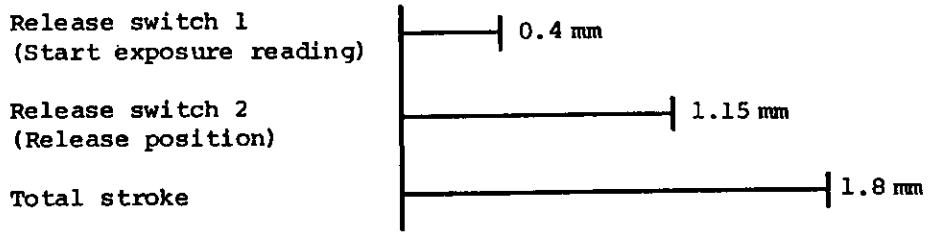


Reference: GENERAL

VIII. SHUTTER RELEASE MECHANISM

CHINON CP-5 camera is furnished with electromagnetic shutter release system. The electromagnetic shutter release, which enable us to take pictures instantly without any time lag made by long stroke of traditional cameras.
Since the electromagnetic shutter release can cocked only with slight touch, we can prevent shutter blurring.

Release stroke (standard)



IX. TROUBLE SHOOTING

A. Relationship of Electricity

1. Shutter cannot be released

Description of defects	Location of defects	Cause
Metering LED does not light up, and shutter cannot be released.	P.C.Board C	Main switch contact defective.
		Release switch S1's contact defective, improper soldering.
	P.C.Board A	D/D convertor, zener diode defective.
	Flexible pattern A	Seralock (6MHz) improper soldering.
Shutter cannot be released even through metering LED light up.	Winder switch	Winder switch is not disengaged, contact defective.
	P.C.Board C	Release switch S2 contact defective, improper leadwire soldering.
	Flexible pattern A	μPD49G 2pin improper soldering.
Metering LED goes out with S2 switch on and shutter cannot be released.	Flexible pattern A	Transistor DV4,5 (2SD596) defective, improper soldering.
	Combination Mg.	Combination Mg. defective, improper leadwire soldering and stain.

2. Metering LED does not light up, or metering LED does not correct light up

Description of defects	Location of defects	Cause
"ϟ" LED does not light up.	Flexible pattern A	Resistor 6.2KΩ contact defective, improper soldering.
"1000" LED does not light up.	Flexible pattern A	uPD49G 14, 25pin improper soldering.
"PROG." LED does not light up.	Flexible pattern A	Resistor 2KΩ of μPD49G 32 pin or LED anode side contact defective, improper soldering.
	P.C.Board C	Foil bridged.
LED continues to light up.	P.C.Board C	Release switch S1, S2 bridged.
"PROG." LED continues to light up.	P.C.Board C	M slider contact defective.

Description of defects	Location of defects	cause
"⚡" LED continues to light up.	P.C.Board F	µPD7001C improper soldering.
Only "OVER" LED light up.	Flexible pattern A	Resistor 10KΩ of EE output transistor (2SC1623)'s base improper soldering.
Only "UNDER" LED light up.	Flexible pattern A	MSA421RS, VR3(22KΩ), Resistor 20 KΩ, 20KΩ of MSA421RS pin7, 8, Resistor 4.7KΩ with Electrolytic capacitor 3.3µF/10V positive side and shield leadwire improper soldering.
	P.C.Board F	µPD7001C improper soldering.
	P.C.Board D	SPD bad connection.
LED light up slow.	P.C.Board A	Resistor 20KΩ with Electrolytic capacitor 2.2µF/16V positive side improper soldering.
"PROG." LED light up at "A" mode.	P.C.Board C	M slider defective or stain.
"UNDER" LED light up at "P" mode.	Flexible pattern A	µPD49G 31, 32pin improper soldering.
LED does not up at "M" mode.	Flexible pattern A	Resistor 47KΩ of µPD49G 24pin improper soldering.
Self-timer LED does not light up.	P.C.Board B	Self LED , leadwire improper soldering.

3. Another electrical troubles

Description of defects	Location of defects	Cause
Program 1, Program 2 does not changes.	P.C.Board C	M slider contact defective.
Mirror box does not charges.	Winder switch	Winder switch's timing defective.
Mirror continues to go up.	Shutter	Improperleadwire soldering.

B. Relationship of Mechanism

1. Mirror box

Description of defects	Location of defects	Cause
Charging defective.	Mirror box	Mirror charge lever defective
		Closing curtain signal lever B defective.
Shutter cannot be released.	Mirror box	Armature lever defective or Armature lever spring disengaged.
		Slide plate defective or Slide plate spring disengaged.
		Trigger lever spring disengaged.
		Reset pin spring disengaged.
With shutter released, mirror does not go up.	Mirror box	Mirror up spring disengaged.
		Mirror down spring erio defective.
F stop-down defective.	Mirror box	Ratchet gear defective.
		F stop-down gear defective.
		F stop lever spring disengaged.

2. Another mechanical troubles

Description of defects,	Location of defects	Cause
Winding lever does not return.	Winding base plate (Lower)	Don't take off.
Counter does not return.	Counter	Counter spring caught.

SERVICE TOOLS LIST
OF
CHINON CP-5

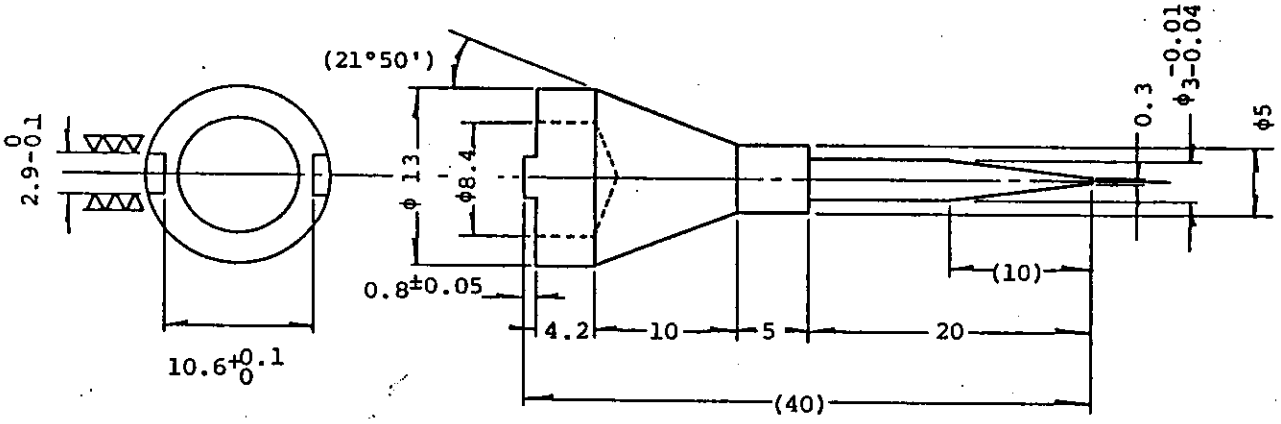
Tool No.	Tool Name	Application
TO-001	(-)Screwdriver set (#1 - 6)	Excellent for all fine work.
TO-002	(+)Screwdriver set (#4 - 6)	
TO-003A	Screwdriver handle: Type A	Interchangeable with various bits.
TO-003B	Screwdriver handle: Type B	"
TO-004A	Screwdriver bit: Type A	For very fine work.
TO-004B	Screwdriver bit: Type B	For fine work.
TO-004C	Screwdriver bit: Type C	For very fine work with long shaft.
TO-011	Precision set	For delicate work.
TO-013	Micro nipper	
TO-015	Plier	
TO-019A	Tweezers: Type A	"AA" size for fine work.
TO-019B	Tweezers: Type B	"MM" size for very fine work.
TO-025	Blower	Safely clean lens surface.
TO-027	Injecter	For oiling or glueing.
TO-028	Glue	Special glue for screws bolts.
TO-029A	Cement: Type A	For bonding the metals.
TO-029B	Cement: Type B	"
TO-032	Cement	For light intercepting
TO-050	Auto collimator (f=80 mm)	For very short focus lenses.
TO-051	Auto collimator (f=120 mm)	For short focus lenses.
TO-052	Auto collimator (f=193.5 mm)	For all lenses.
TO-053	Auto collimator (f=300 mm)	For long focus lenses.
TO-054	Auto collimator (f=500 mm)	For very long focus lenses.
TO-055	Infinity collimator	Checking or adjusting viewfinder focus.
TO-056	Lens micro-meter	Equiped with auto collimator.
TO-057	DC power source (2A)	Regulated DC power supply.
TO-058	Tester	All purpose.
TO-059	Digital multimeter	For measuring the voltage and resistance
TO-060	Mega ohm tester	For checking electric leakage.
TO-064	Shutter tester	For measuring the shutter speed.
TO-065	Multi camera tester	For measuring the exposure.
TO-066	EE tester	"
TO-067	F number tester	Measuring the difference of value against the standard F.
T2-201	Camera stand	
T2-202	Dial gauge	For checking the level of camera mount.
T2-204B	Flange back gauge: Type B	For bayonet mount.
T2-205	Mirror stand	For checking or adjusting focus and equipped with auto collimator.
T2-260	Spanner wrench	Tightening or loosening a parts of "Release button guide (1371B0C-2021A)"

* For specifications, detailed explanation, and price of these, please refer to already distributed lists of "TOOLS & INSTRUMENTS".

Special Tools

#T2-260
Tightening or loosening a parts of "Release button guide"

Unit: mm



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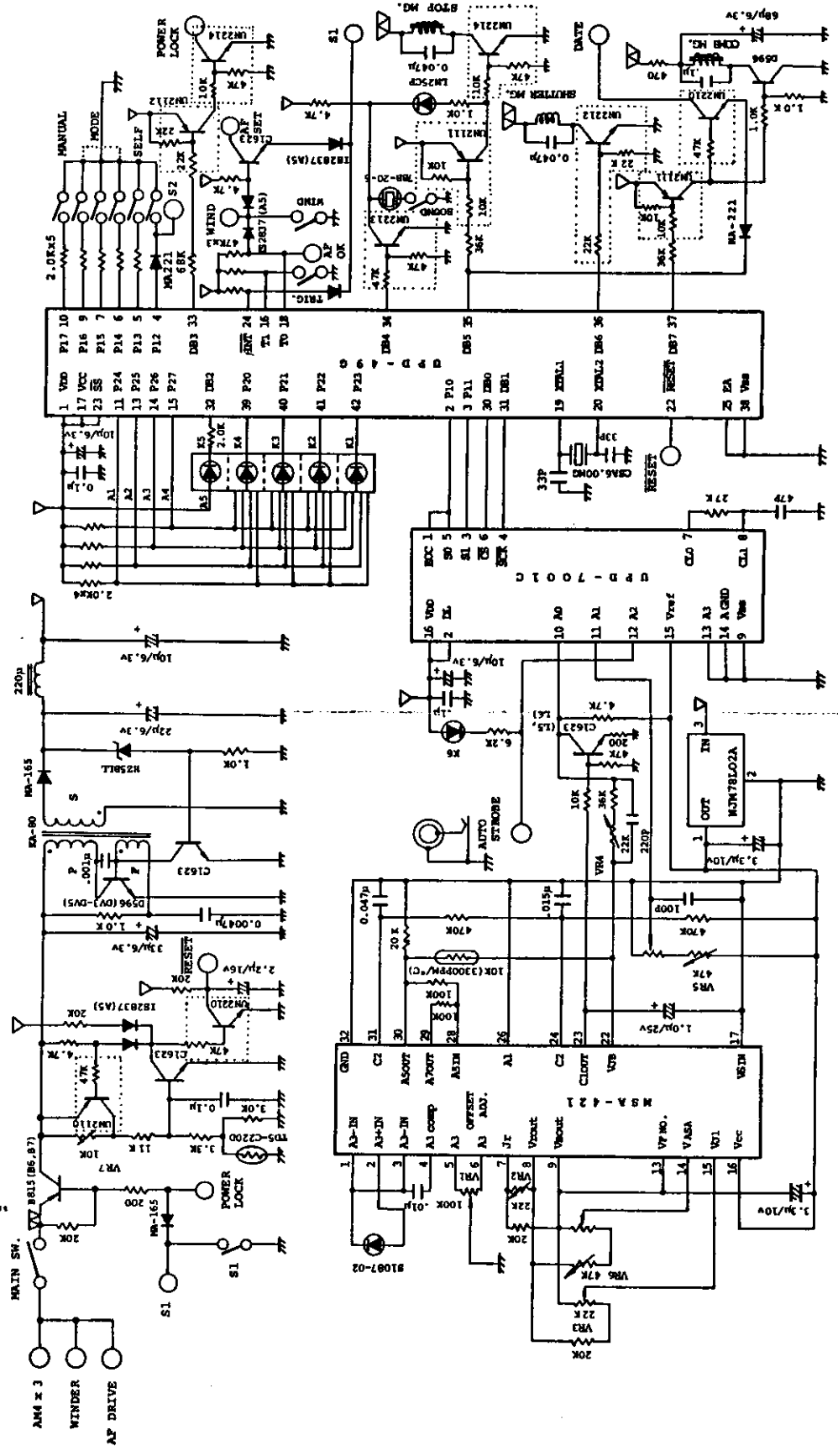
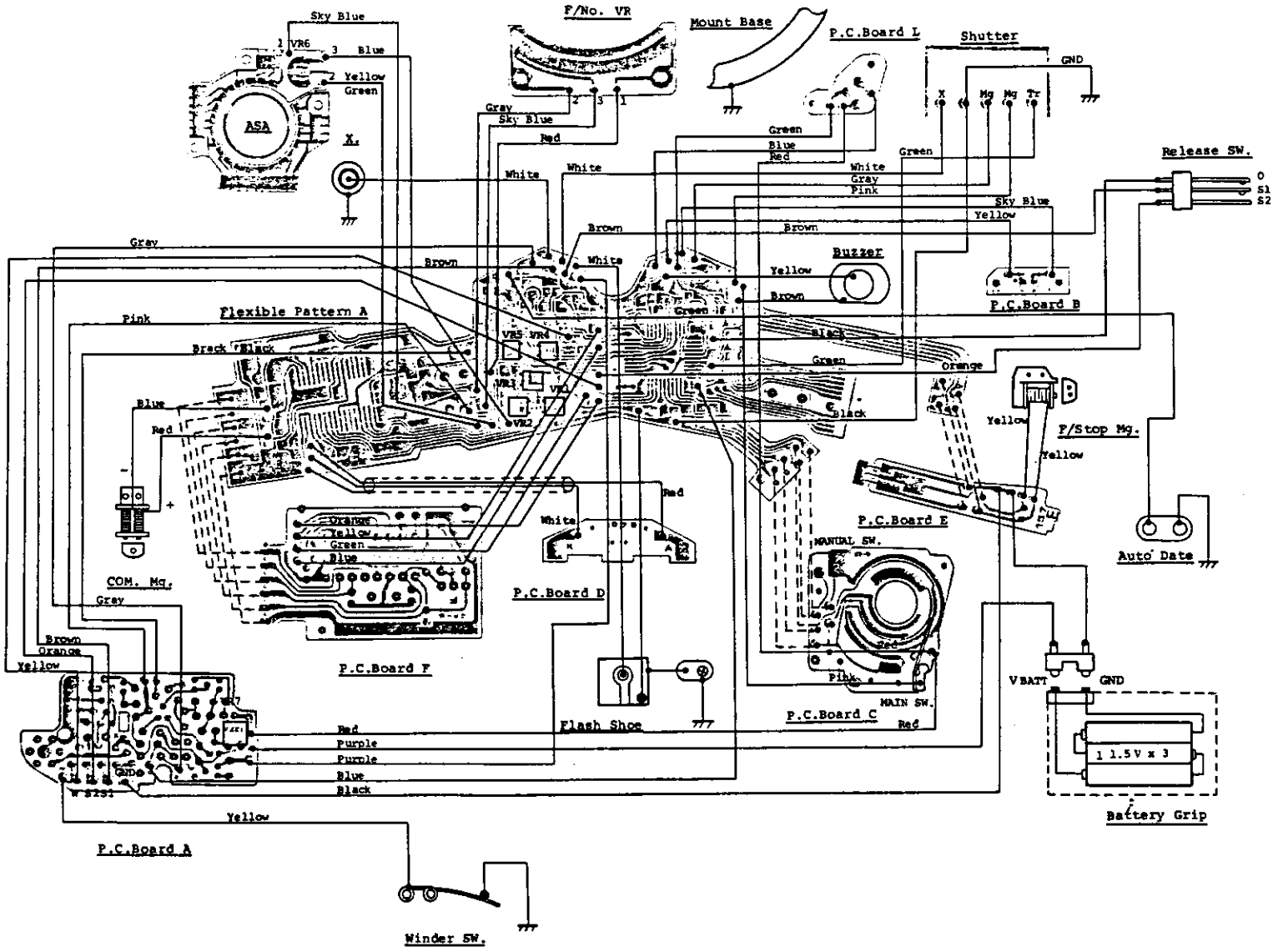
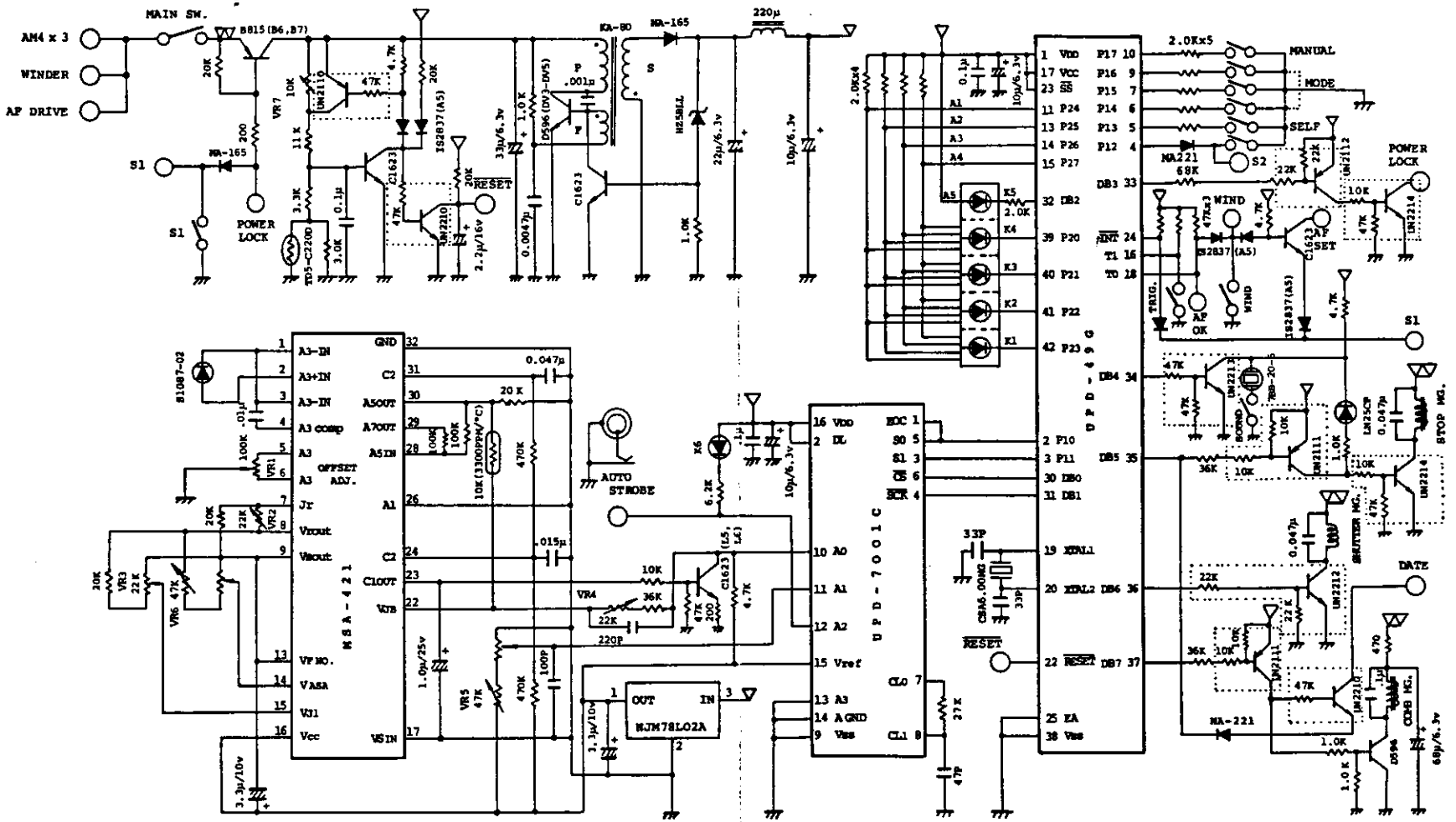


SCHEMATIC DIAGRAM FOR CHINON CP-5

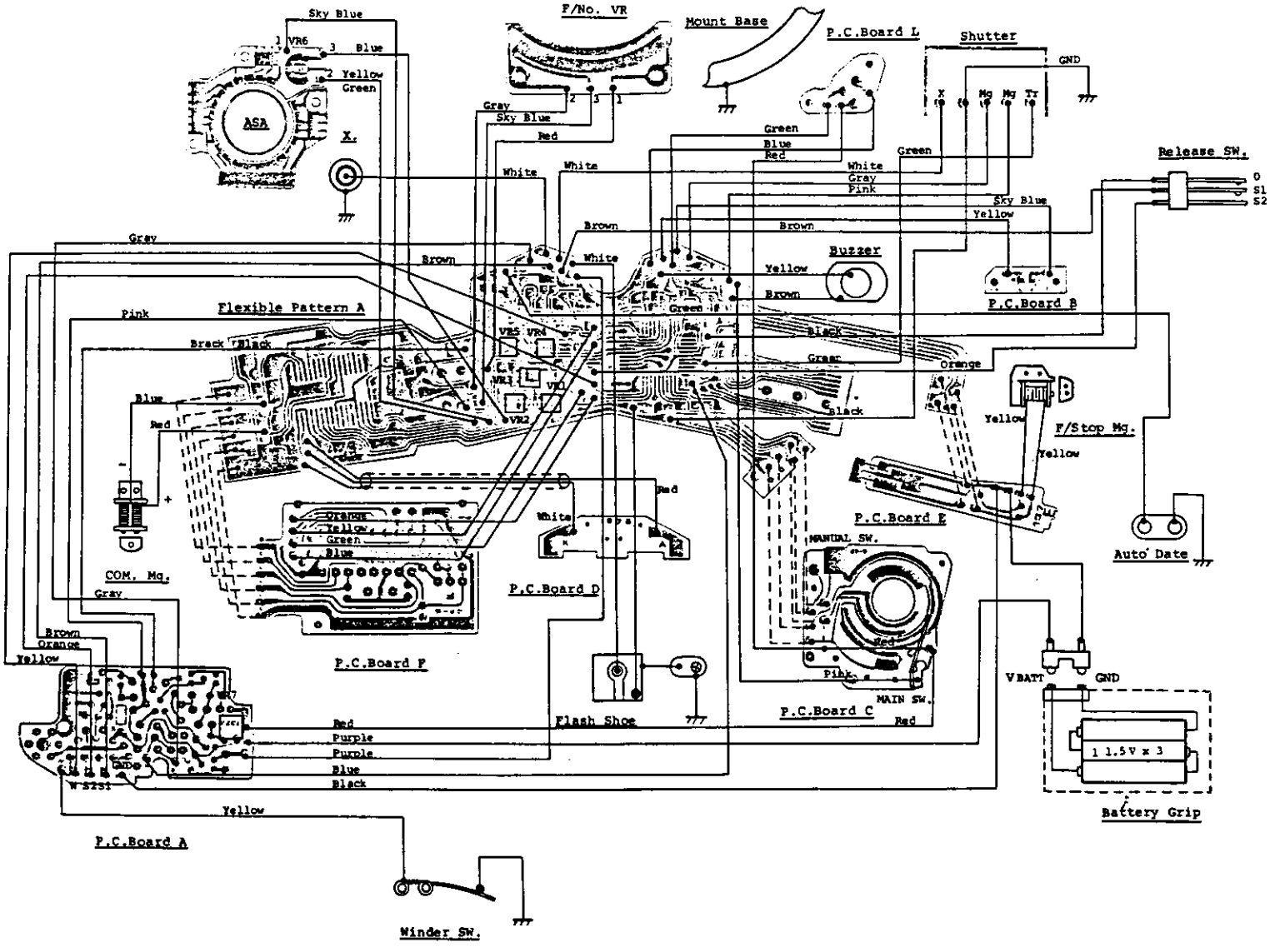
WIRING DIAGRAM FOR CHINON CP-5



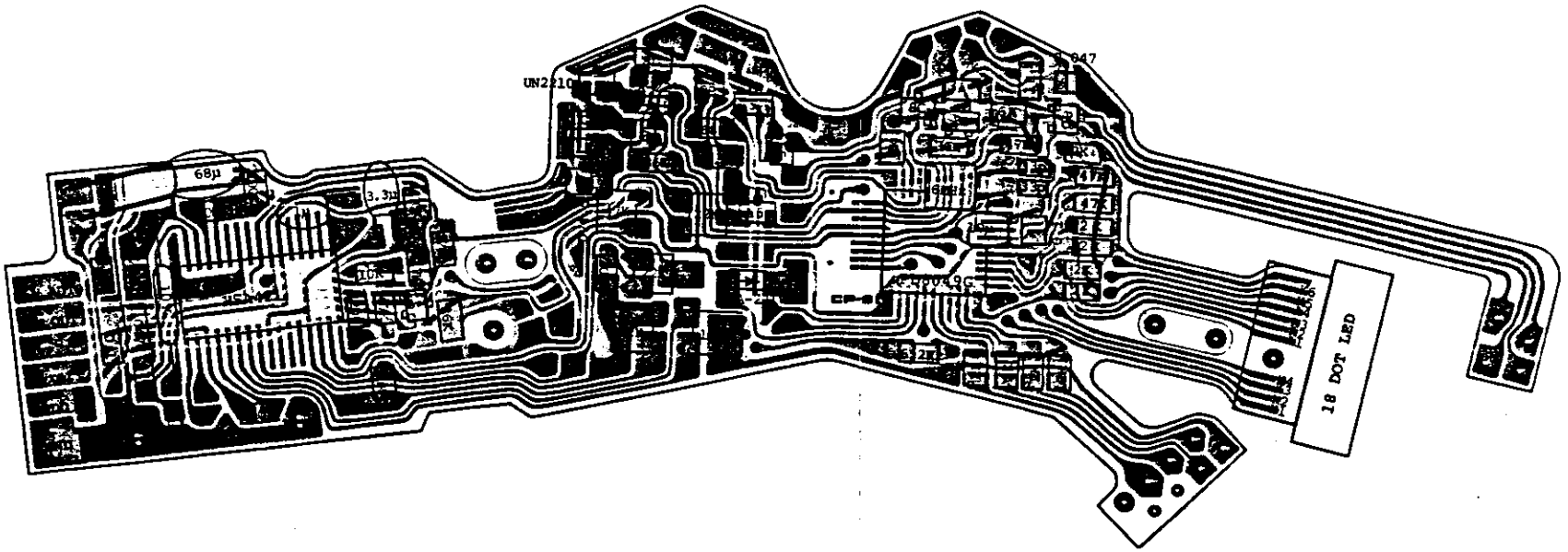
SCHEMATIC DIAGRAM FOR CHINON CP-5



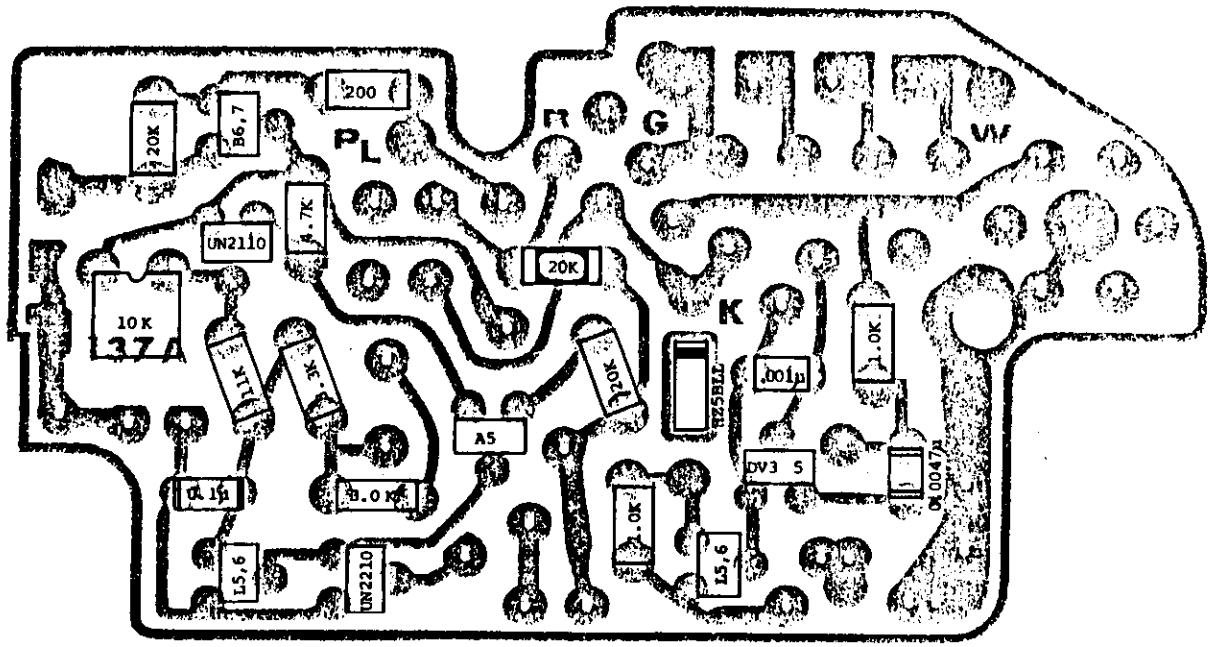
WIRING DIAGRAM FOR CHINON CP-5



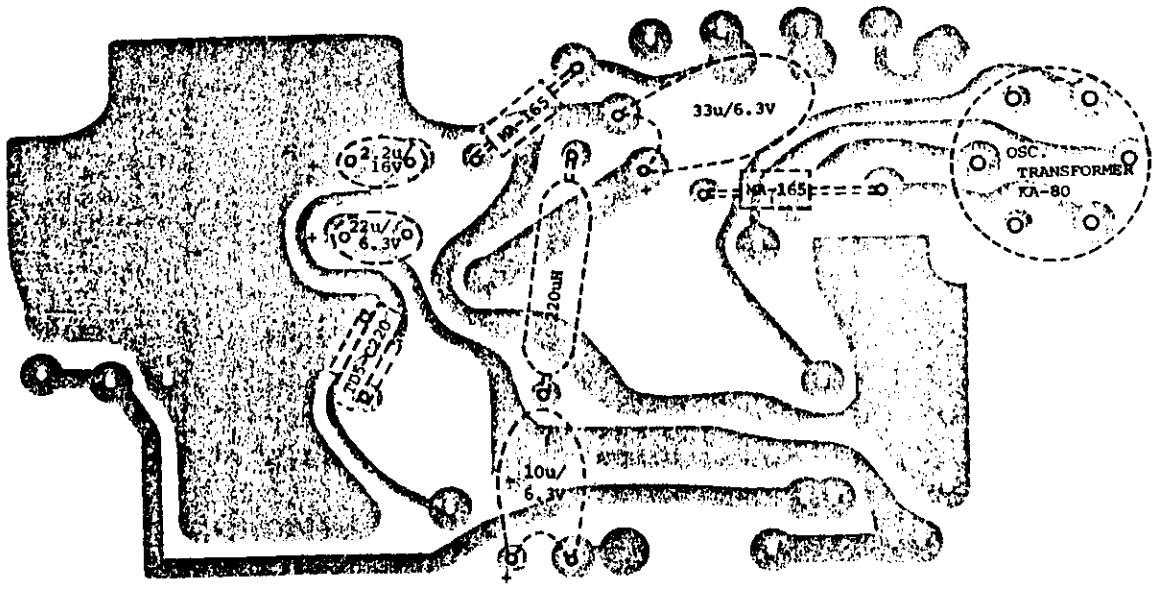
FLEXIBLE PATTERN A FOR CHINON CP-5



P.C.BOARD A

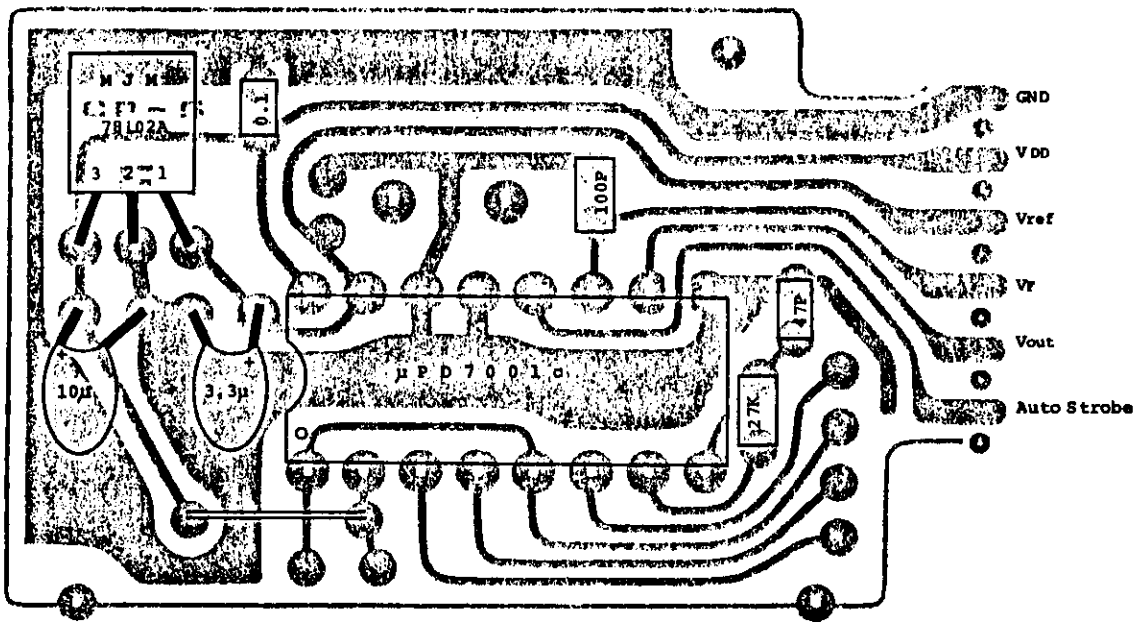


P.C.BOARD A (Front View)

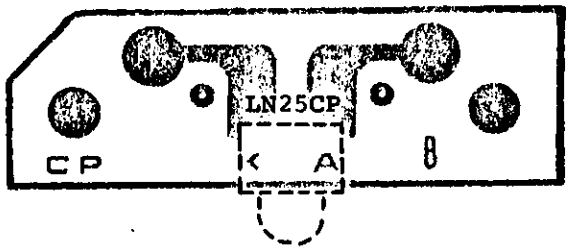


P.C.BOARD A (Rear View)

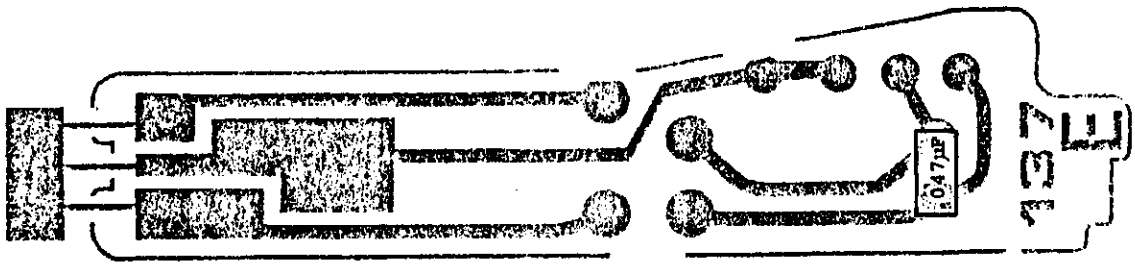
P.C.BOARD F, B & E



P.C.BOARD F



P.C.BOARD B



P.C.BOARD E

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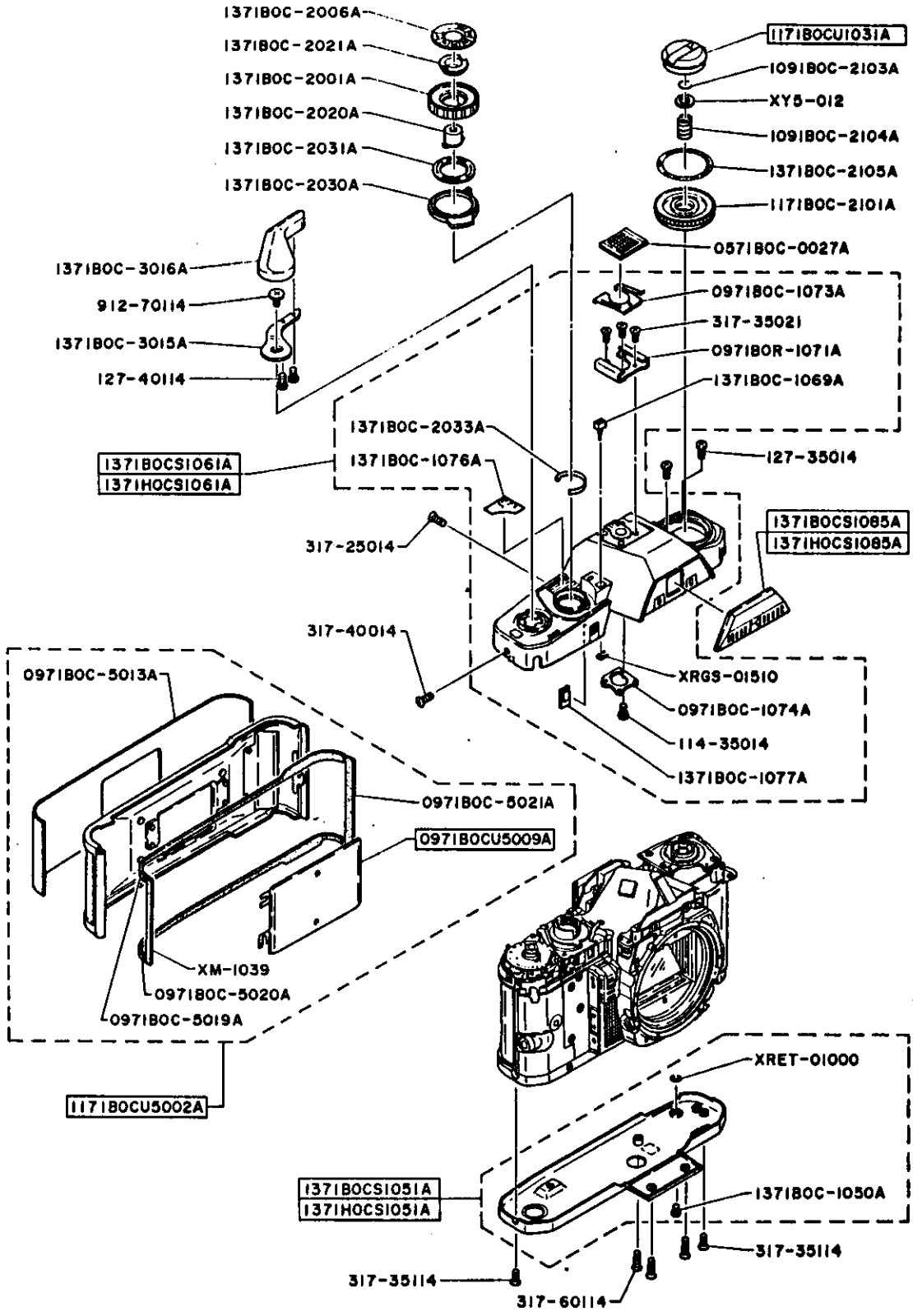
1

EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM



OUTER COVERS(TOP, BOTTOM, & BACK COVERS)

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	ﾏｷﾓﾄﾞｼﾉﾌﾞ ｾｯﾄ	D	1171B0CU1031A	1	Rewinding knob
	ｼﾀｶﾊﾞｰ ｾｯﾄ	C	1371B0CS1051A	1	Bottom cover
	ｳﾜｶﾊﾞｰ ｾｯﾄ	C	1371B0CS1061A	1	Top cover
	ﾌﾞﾗﾝﾄﾞﾊﾞﾝ ｾｯﾄ	A	1371B0CS1085A	1	Name plate
	ｳﾗﾌﾞﾀﾏｴｸﾞﾐ ｾｯﾄ	C	1171B0CU5002A	1	Back cover
	ｱｯﾊﾟﾝ ｾｯﾄ	D	0971B0CU5009A	1	Pressure plate
	ｼｭｰｶﾊﾞｰ	D	0571B0C-0027A	1	Hot shoe cover
	ﾃﾞﾝｹﾞﾝｾｯﾃﾝ	D	1371B0C-1050A	1	Power contact
	Mﾎﾞﾀﾝ	D	1371B0C-1069A	1	M button
	ACｼｭｰ	D	0971B0R-1071A	1	Hot shoe
	ｼｭｰﾊﾞﾈ	D	0971B0C-1073A	1	Hot shoe spring
	ｼｮｰﾄﾘﾘﾂｸｻﾞ	D	0971B0C-1074A	1	Hot shoe mount base
	Pﾓｰﾄﾞﾒｲﾊﾞﾝ	D	1371B0C-1076A	1	P-Mode trim plate
	ｾﾙﾌLEDﾏﾄﾞ	D	1371B0C-1077A	1	Self LED window
	Mﾀﾞｲｱﾙ	D	1371B0C-2001A	1	M dial
	Mﾒｲﾊﾞﾝ	A	1371B0C-2006A	1	M trim plate
	ﾚﾘｰｽﾞﾎﾞﾀﾝ	D	1371B0C-2020A	1	Release button
	ﾚﾘｰｽﾞﾎﾞﾀﾝｶﾞｲﾄﾞ	D	1371B0C-2021A	1	Release button guide
	Pﾚﾊﾞｰ	D	1371B0C-2030A	1	P lever
	Pﾚﾊﾞｰﾎｼﾞｮｲﾀ	D	1371B0C-2031A	1	P lever subsidiary plate
	Pｸﾘｯｸﾊﾞﾈ	D	1371B0C-2033A	1	P click spring
	ASAﾀﾞｲｱﾙ	C	1171B0C-2101A	1	ASA dial
	ASAﾘﾝｸﾞ	B	1091B0C-2103A	1	ASA ring
	ASASP	B	1091B0C-2104A	1	Spring
	ASAﾀﾞｲｱﾙﾒｲﾊﾞﾝ	D	1371B0C-2105A	1	ASA dial trim plate
	ﾏｷｱｹﾞﾚﾊﾞｰ	D	1371B0C-3015A	1	Advance lever
	ﾏｷｱｹﾞｶﾊﾞｰ	C	1371B0C-3016A	1	Advance lever cover
	ｳﾗﾌﾞﾀﾚｻﾞｰ	D	0971B0C-5013A	1	Back cover leather
	ｳﾗﾌﾞﾀﾊﾟｯｷﾝｳｴ	D	0971B0C-5019A	1	Sponge
	ｳﾗﾌﾞﾀﾊﾟｯｷﾝｼﾀ	D	0971B0C-5020A	1	Sponge
	ｳﾗﾌﾞﾀﾃﾚﾝﾌﾟ	D	0971B0C-5021A	1	Ribbon
	ｳﾗﾌﾞﾀｼｬｺｳﾊﾟｯｷﾝ 097		XM-1039	1	Sponge
	Eﾘﾝｸﾞ 1.0		XRET-01000	1	E ring
	GSﾘﾝｸﾞ 15		XRGS-01510	1	GS ring
	5.45X8.0-0.4 ASAﾜｯｼｬ		XY5-012	1	Washer
	PHK1.4X3.5-2.5X0.5		114-35014	1	Screw
	THK1.7X3.5-2.5X0.5		127-35014	2	Screw
	THK1.7X4.0-3.0X0.6		127-40114	2	Screw
	PSK1.7X2.5-2.5X0.5		317-25014	1	Screw
	PSK1.7X3.5-2.5X0.5		317-35021	3	Screw
	PSK1.7X3.5-3.0X0.6		317-35114	2	Screw
	PSK1.7X4.0-2.5X0.5		317-40014	1	Screw
	PSK1.7X6.0-3.0X0.5		317-60114	3	Screw
	PDK2.0X3.5-5.4X1.0-		912-70114	1	Screw

The following parts are used exclusively for CHINON CP-5 SILVER.

	ｼﾀｶﾊﾞｰ ｾｯﾄ	C	1371H0CS1051A	1	Bottom cover
	ｳﾜｶﾊﾞｰ ｾｯﾄ	C	1371H0CS1061A	1	Top cover
	ﾌﾞﾗﾝﾄﾞﾊﾞﾝ ｾｯﾄ	A	1371H0CS1085A	1	Name plate

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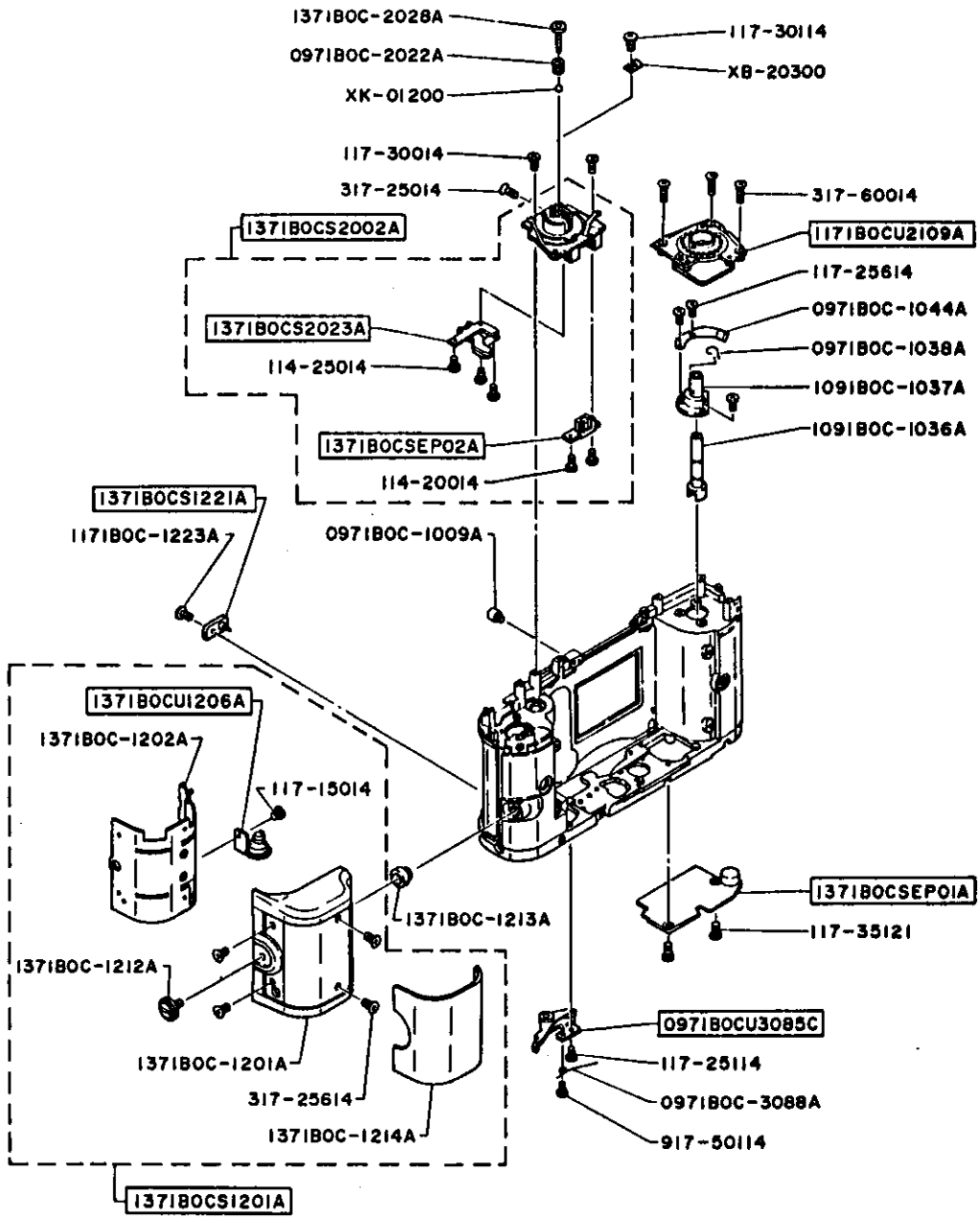
EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM



BATTERY CASE, M DIAL BASE PLATE, & ASA BASE PLATE

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	ﾃﾞﾝﾁｹｰｽ ｾｯﾄ	D	1371B0CS1201A	1	Battery case
	ﾎﾝﾀｲｾｯﾃﾝｳｹ ｾｯﾄ	D	1371B0CS1221A	1	Direct contact
	Mﾀﾞｲｱﾙｷﾍﾞﾝ ｾｯﾄ	D	1371B0CS2002A	1	M dial base plate
	ASAｷﾍﾞﾝ ｾｯﾄ	D	1171B0CU2109A	1	ASA base plate
	ﾚﾘｰｽﾞSW ｾｯﾄ	D	1371B0CS2023A	1	Release switch
	ｹｲｼﾚﾊﾞｰ ｾｯﾄ	D	0971B0CU3085C	1	Stop lever
	ﾌﾟﾘﾝﾄｷﾍﾞﾝA ｾｯﾄ	D	1371B0CSEP01A	1	P.C.Board A
	ﾌﾟﾘﾝﾄｷﾍﾞﾝB ｾｯﾄ	D	1371B0CSEP02A	1	P.C.Board B
	ﾌｨﾙﾑｶﾞｲﾄﾞﾋﾟﾝ	D	0971B0C-1009A	1	Screw
	ﾏｷﾓﾄﾞｼｼﾞｸ	D	1091B0C-1036A	1	Rewinding shaft
	ﾏｷﾓﾄﾞｼｻﾞ	D	1091B0C-1037A	1	Rewinding shaft base
	ﾏｷﾓﾄﾞｼSP	D	0971B0C-1038A	1	Spring
	ｶｲﾍｲﾊﾞﾈ	D	0971B0C-1044A	1	Door latch spring
	ﾃﾞﾝﾁｹｰｽ	C	1371B0C-1201A	1	Battery case
	ﾃﾞﾝﾁｹｰｽｶﾊﾞｰ	D	1371B0C-1202A	1	Battery case cover
	ﾃﾞﾝﾁｾｯﾍﾟﾝD	D	1371B0C-1206A	1	Battery contact D
	ﾃﾞﾝﾁｾｯﾃﾝSP	D	1371B0C-1208A	3	Battery contact spring
	ﾃﾞﾝﾁｹｰｽﾄﾘﾂｹﾈｼﾞ	D	1371B0C-1212A	1	Screw
	ﾃﾞﾝﾁｹｰｽﾄﾘﾂｹﾅｯﾄ	D	1371B0C-1213A	1	Nut
	ﾃﾞﾝﾁｹｰｽﾚｻﾞｰ	B	1371B0C-1214A	1	Battery case leather
	ﾎﾝﾀｲｾｯﾃﾝB	D	1171B0C-1223A	1	Direct contact B
	ﾚﾘｰｽﾞｼﾞｸSP	D	0971B0C-2022A	1	Spring
	ﾚﾘｰｽﾞｼﾞｸ	D	1371B0C-2028A	1	Release shaft
	ｹｲｼﾚﾊﾞｰSP	D	0971B0C-3088A	1	Spring
	ﾘｰﾄﾞｾﾝﾎﾙﾀﾞｰC		XB-20300	1	Lug plate
	ｽﾁｰﾙﾎﾞｰﾙ 1.2		XK-01200	1	Steel ball
	PHK1.4X2.0-2.5X0.5		114-20014	2	Screw
	PHK1.4X2.5-2.5X0.5		114-25014	3	Screw
	PHK1.7X1.5-2.5X0.5		117-15014	1	Screw
	PHK1.7X2.5-3.0X0.6		117-25114	1	Screw
	PHK1.7X2.5-3.0X0.9		117-25614	3	Screw
	PHK1.7X3.0-2.5X0.5		117-30014	2	Screw
	PHK1.7X3.0-3.0X0.6		117-30114	1	Screw
	PHK1.7X3.5-3.0X0.6		117-35114	2	Screw
	PSK1.7X2.5-2.5X0.5		317-25014	1	Screw
	PSK1.7X2.5-3.0X0.8		317-25614	4	Screw
	PSK1.7X6.0-2.5X0.5		317-60014	3	Screw
	PDK1.7X2.5-2.4X0.8-		917-50114	1	Screw

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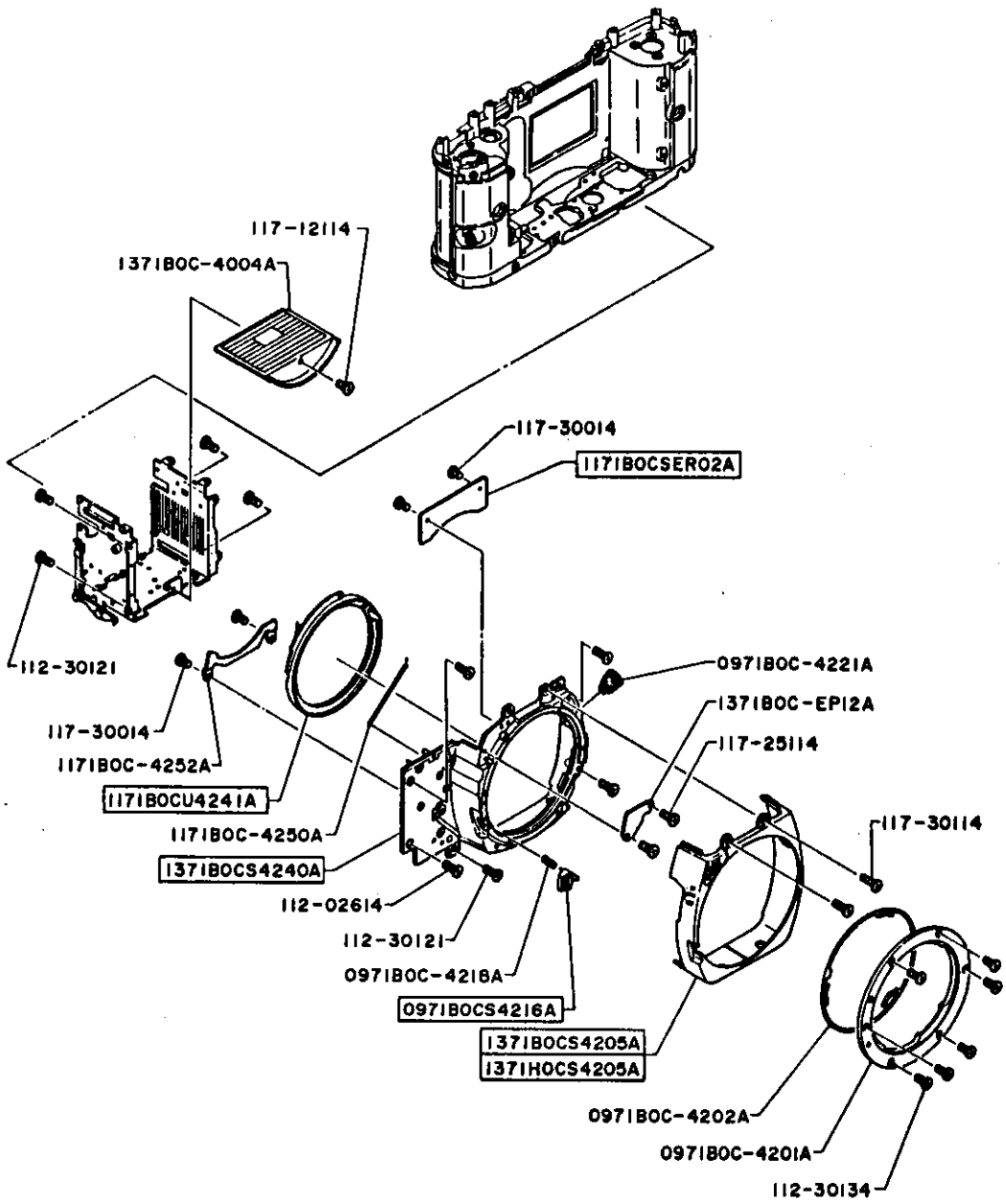
EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM



MIRROR HOUSING DISASSEMBLY (1)

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	ﾐﾗｰﾎﾞｯｸｽ ｾｯﾄ	C	1371B0CS4001A	1	Mirror housing
	ﾏｳﾝﾄﾍﾞｰｽ ｾｯﾄ	G D	1371B0CS4240A	1	Mount base
	Fﾁｪﾚﾝﾄﾞｳﾘﾝｸﾞ ｾｯﾄ	C	1171B0CS4241A	1	F/No. information ring
	ﾏｳﾝﾄﾛｯｸﾋﾟﾝｳｹ ｾｯﾄ	D	0971B0CS4216A	1	Mount lock pin
	Fｴﾚﾒﾝﾄ ｾｯﾄ	D	1171B0CSER02A	1	F element
	ﾊﾞﾖﾈｯﾄﾏｳﾝﾄ	D	0971B0C-4201A	1	Bayonet mount
	ﾏｳﾝﾄﾊﾞﾈ	D	0971B0C-4202A	1	Mount spring
	ﾛｯｸﾋﾟﾝSP	D	0971B0C-4218A	1	Spring
	ｼﾝｸﾛﾌﾟﾗｸﾞ	D	0971B0C-4221A	1	"X" contact plug
	FﾁSP	D	1171B0C-4250A	1	Spring
	Fﾁｪﾚﾝﾄﾞｳﾘﾝｸﾞｵｻｴ	D	1171B0C-4252A	1	Ring holder
	ﾌﾟﾘﾝﾄｷﾊﾞﾝL	D	1371B0C-EP12A	1	P.C.Board L
	PHK2.0X3.0-3.0X0.7		112-02614	4	Screw
	PHK2.0X3.0-3.0X0.6		112-30121	5	Screw
	PHK2.0X3.0-3.0X0.6		112-30134	5	Screw
	PHK1.7X1.2-3.0X0.5		117-12114	1	Screw
	PHK1.7X2.5-3.0X0.6		117-25114	2	Screw
	PHK1.7X3.0-2.5X0.5		117-30014	4	Screw
	PHK1.7X3.0-3.0X0.6		117-30114	6	Screw

Mirror housing(1371B0CS4001A) is composed of parts shown on page 3, 4, 5, and 6 without following parts.

	ﾏｴｶﾊﾞｰ ｾｯﾄ	C	1371B0CS4205A	1	Front cover
	ﾏｴｶﾊﾞｰ ｾｯﾄ	C	*1371H0CS4205A	1	Front cover
	ﾐﾗｰﾎﾞｯｸｽD	D	1371B0C-4004A	1	Mirror box D

* marking : For the exclusive use of CHINON CP-5 SILVER.

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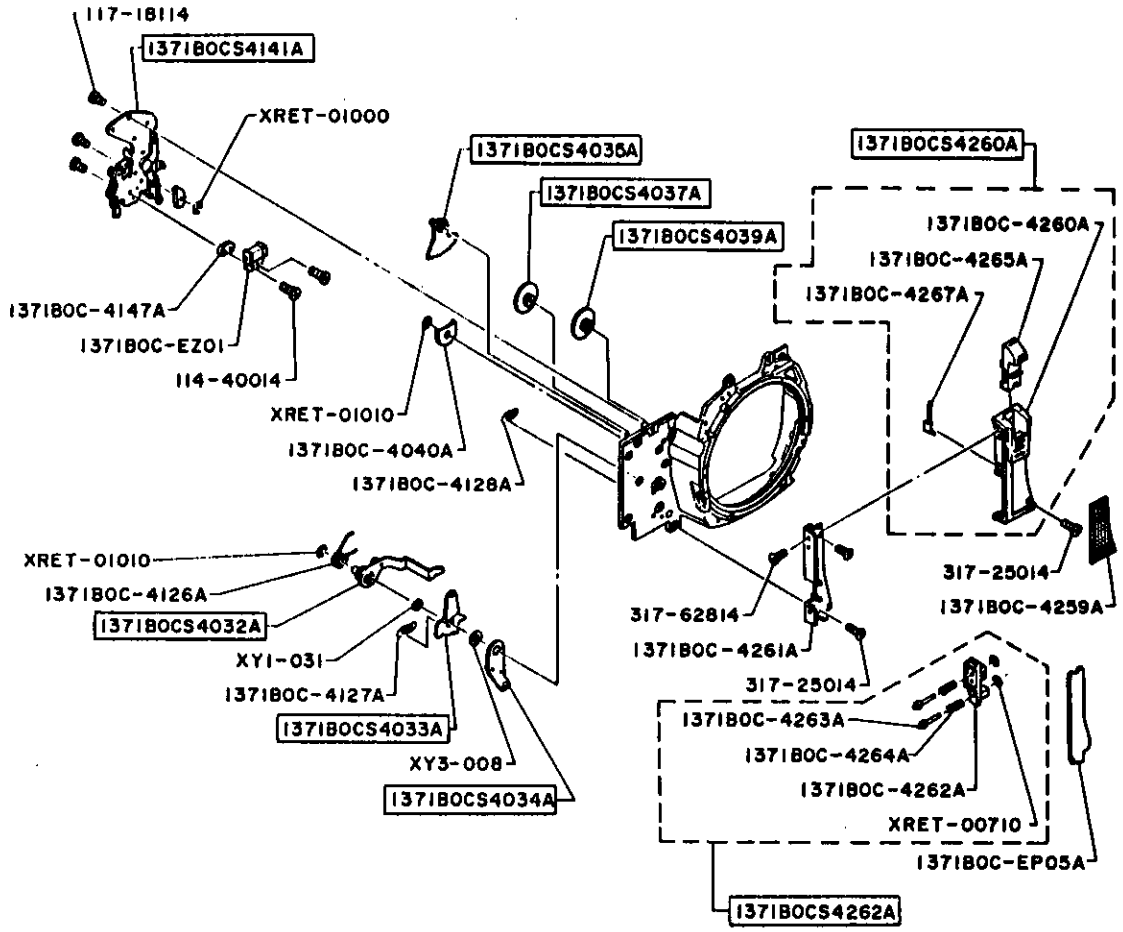
EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM



MIRROR HOUSING DISASSEMBLY (2)

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	ｼﾎﾞﾘｺﾐﾚﾊﾞｰA ｾｯﾄ	G D	1371B0CS4032A	1	Stop-down lever A
	ｼﾎﾞﾘｺﾐﾚﾊﾞｰB ｾｯﾄ	G D	1371B0CS4033A	1	Stop-down lever B
	ｼﾎﾞﾘｺﾐﾚﾊﾞｰB ｾｯﾄ	G D	1371B0CS4034A	1	Stop-down lever C
	ｼﾎﾞﾘｺﾐｷﾞﾔA ｾｯﾄ	G D	1371B0CS4035A	1	Stop-down gear A
	ｼﾎﾞﾘｺﾐｷﾞﾔC ｾｯﾄ	G D	1371B0CS4037A	1	Stop-down gear C
	ｼﾎﾞﾘﾗﾁｪｯﾄ ｾｯﾄ	G D	1371B0CS4039A	1	Stop-down ratchet
	ｼﾎﾞﾘｺﾐｷﾊﾞﾝ ｾｯﾄ	G D	1371B0CS4141A	1	Stop-down base plate
	ｼﾎﾞﾘｺﾐｷﾞﾔﾂﾒ	D	1371B0C-4040A	1	Stop-down gear claw
	ｼﾎﾞﾘｺﾐﾚﾊﾞｰASP	D	1371B0C-4126A	1	Spring
	ｼﾎﾞﾘｺﾐﾚﾊﾞｰBSP	D	1371B0C-4127A	1	Spring
	ｼﾎﾞﾘｱｰﾏﾁｬｰﾘｾｯﾄSP	D	1371B0C-4128A	1	Spring
	ｼﾎﾞﾘﾏｸﾞﾈｯﾄﾀﾞｲ	D	1371B0C-4147A	1	Magnet pedestal
	ｼﾎﾞﾘｽﾄｯﾌﾟMG	D	1371B0C-EZ01A	1	Magnet
	Eﾘﾝｸﾞ 1.0		XRET-01000	1	E ring
	Eﾘﾝｸﾞ 1.0		XRET-01010	1	E ring
	HW1.7X4.0-0.4		XY1-031	1	Washer
	ﾜｯｼｬｰ 3.2X5.0-0.4		XY3-008	1	Washer
	PHK1.4X4.0-2.5X0.5		114-40014	2	Screw
	PHK1.7X1.8-3.0X0.6		117-18114	3	Screw

Mirror housing is composed of parts shown on page 3, 4, 5, and 6 without following parts.

	ﾏｴｶｻﾞﾘｲﾀ ｾｯﾄ	D	1371B0CS4260A	1	Front decoration plate
	ﾃﾞﾝﾁｾｯﾃﾝｳｹ ｾｯﾄ	D	1371B0CS4262A	1	Power contact holder
	ﾏｴｶｻﾞﾘｲﾀﾚｻﾞｰ	C	1371B0C-4259A	1	Leather
	ﾏｴｶｻﾞﾘｲﾀ	D	1371B0C-4260A	1	Front decoration plate
	ﾏｴｶｻﾞﾘｷﾊﾞﾝ	D	1371B0C-4261A	1	Front decoration base plate
	ﾃﾞﾝﾁｾｯﾃﾝｳｹ	D	1371B0C-4262A	1	Power contact holder
	ﾃﾞﾝﾁｾｯﾃﾝ	D	1371B0C-4263A	2	Power contact
	ﾃﾞﾝﾁｾｯﾃﾝｳｹSP	D	1371B0C-4264A	2	Spring
	ｾﾙﾌﾚﾊﾞｰ	D	1371B0C-4265A	1	Self lever
	ｾﾙﾌｸﾘｯｸﾊﾞﾈ	D	1371B0C-4267A	1	Self click spring
	ﾌﾟﾘﾝﾄｷﾊﾞﾝE	D	1371B0C-EP05A	1	P.C.Board E
	Eﾘﾝｸﾞ 0.7		XRET-00710	2	E ring
	PSK1.7X2.5-2.5X0.5		317-25014	3	Screw
	PSK1.7X6.2-2.5X0.5		317-62814	1	Screw

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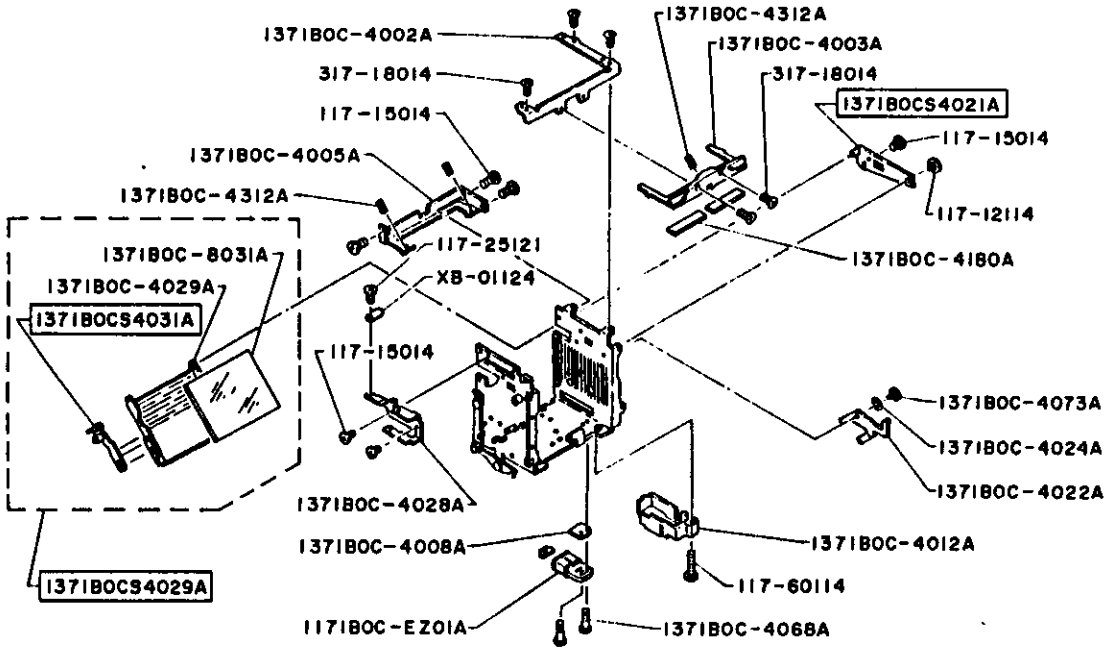
EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM



MIRROR HOUSING DISASSEMBLY (3)

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	ﾐﾗｰｼｼﾞﾊﾞﾝB ｾｯﾄ	G D	1371B0CS4021A	1	Mirror frame supporter B
	ﾒｲﾝﾐﾗｰﾜｸ ｾｯﾄ	G D	1371B0CS4029A	1	Main mirror frame
	ﾐﾗｰﾎｼﾞｮﾜｸ ｾｯﾄ	G D	1371B0CS4031A	1	Mirror subsidiary frame
	ﾐﾗｰﾎﾞｯｸｽB	D	1371B0C-4002A	1	Mirror box B
	ﾐﾗｰﾎﾞｯｸｽC	D	1371B0C-4003A	1	Mirror box C
	ﾐﾗｰﾎﾞｯｸｽE	D	1371B0C-4005A	1	Mirror box E
	ﾏｸﾞﾈｯﾄﾀﾞｲ	D	1371B0C-4008A	1	Magnet pedestal
	ﾏｸﾞﾈｯﾄｶﾊﾞｰ	D	1371B0C-4012A	1	Magnet cover
	ﾒｲﾝﾐﾗｰｳｹ	D	1371B0C-4022A	1	Main mirror holder
	ﾐﾗｰｳｹHW	D	1371B0C-4024A	1	Washer
	LEDｷﾊﾞﾝ	D	1371B0C-4028A	1	LED base plate bracket
	ﾒｲﾝﾐﾗｰﾜｸ	D	1371B0C-4029A	1	Main mirror frame
	ﾏｸﾞﾈｯﾄﾖｳﾈｼﾞ	D	1371B0C-4068A	1	Screw
	ｽﾗｲﾄﾞﾌﾟﾚｰﾄｶﾞｲﾄﾞA	D	1371B0C-4073A	1	Slide plate guide A
	ﾐﾗｰﾎﾞｯｸｽﾊﾟｯｷﾝﾏｴ	D	1371B0C-4180A	2	Sponge
	ﾋﾟﾝﾄﾁｮｳｾｲﾋﾞｽ	D	1371B0C-4312A	3	Adjustment screw
	ﾒｲﾝﾐﾗｰ	D	1371B0C-8031A	1	Main mirror
	ｺﾝﾋﾞﾈｰｼｮﾝﾏｸﾞﾈｯﾄ	D	1171B0C-EZ01A	1	Combination magnet
	ﾗｸﾞﾊﾞﾝﾀﾝｼ		XB-01124	1	Lug plate
	PHK1.7X1.2-3.0X0.5		117-12114	1	Screw
	PHK1.7X1.5-2.5X0.5		117-15014	7	Screw
	PHK1.7X6.0-3.0X0.5		117-60114	1	Screw
	PSK1.7X1.8-2.5X0.5		317-18014	5	Screw

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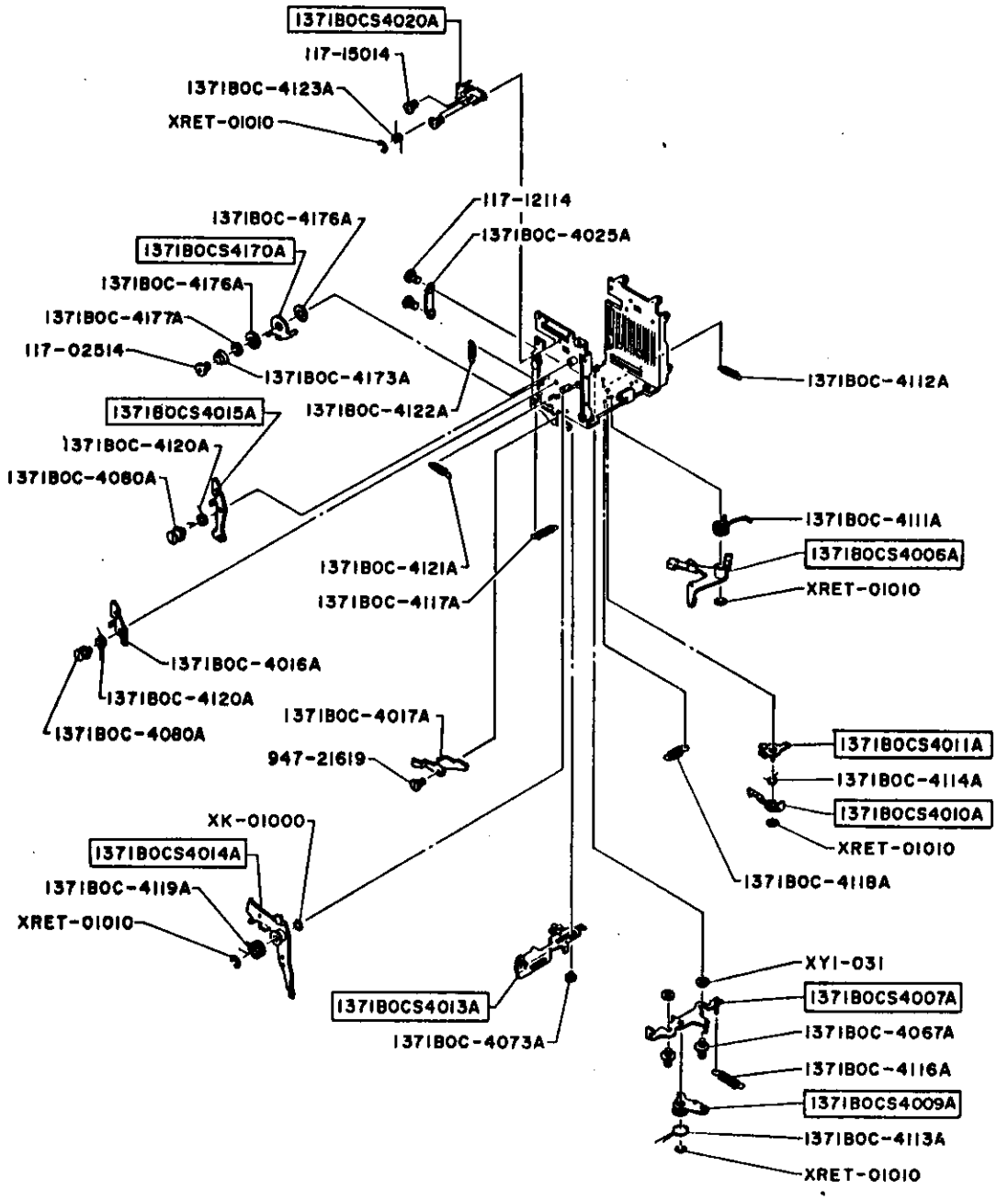
EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM



MIRROR HOUSING DISASSEMBLY (4)

ORDER QTY	部品名称	CLASS	PARTS NO.	QTY	PARTS NAME
	ミラーチャージ゛レバー セット	G D	1371B0CS4006A	1	Mirror charge lever
	アーマチャーレバー セット	G D	1371B0CS4007A	1	Armature lever
	トリガ゛ーレバー セット	G D	1371B0CS4009A	1	Trigger lever
	スタートフックレバー セット	G D	1371B0CS4010A	1	Start hook lever
	アーマチャーレバーオサエ セット	G D	1371B0CS4011A	1	Armature lever holder
	スライト゛フ゜レート セット	G D	1371B0CS4013A	1	Slide plate
	ミラーレバー セット	G D	1371B0CS4014A	1	Mirror lever
	ミラーフックレバーA セット	G D	1371B0CS4015A	1	Mirror hook lever A
	ミラーシ゛ハ゛ンA セット	G D	1371B0CS4020A	1	Mirror supporter B
	ミラーフリクションレバー セット	G D	1371B0CS4170A	1	Mirror friction lever
	ミラーフックレバーB	D	1371B0C-4016A	1	Mirror hook lever B
	シャッターレリース゛レバー	D	1371B0C-4017A	1	Shutter release lever
	シホ゛リコミレバーオサエ	D	1371B0C-4025A	1	Stop-down lever holder
	アーマチャーレバーカ゛イト゛	D	1371B0C-4067A	1	Armature lever guide
	スライト゛フ゜レートカ゛イト゛A	D	1371B0C-4073A	1	Slide plate guide A
	ミラーフックレバーシ゛ク	D	1371B0C-4080A	1	Mirror hook lever shaft
	ミラーチャージ゛レバーSPA	D	1371B0C-4111A	1	M charge lever spring A
	ミラーチャージ゛レバーSPB	D	1371B0C-4112A	1	M charge lever spring B
	トリガ゛ーレバーSP	D	1371B0C-4113A	1	Trigger lever spring
	スタートフックSP	D	1371B0C-4114A	1	Start hook spring
	アーマチャーレバーSP	D	1371B0C-4116A	1	Armature lever spring
	スライト゛フ゜レートSP	D	1371B0C-4117A	1	Slide plate spring
	アーマチャーレバーオサエSP	D	1371B0C-4118A	1	Armature lever hold. sp.
	ミラーアップ゜SP	D	1371B0C-4119A	1	Mirror-up spring
	ミラーフックレバーSP	D	1371B0C-4120A	2	Mirror hook lever spring
	サキマクSP	D	1371B0C-4121A	1	Opening curtain spring
	アトマクSP	D	1371B0C-4122A	1	Closing curtain spring
	メインミラーSP	D	1371B0C-4123A	1	Main mirror spring
	ミラーフリクションSPA	D	1371B0C-4173A	1	Mirror friction spring A
	ミラーフリクションHWB	D	1371B0C-4176A	2	Mirror friction washer B
	ミラーフリクションHWC	D	1371B0C-4177A	1	Mirror friction washer C
	スチールホ゛ール 1.0		XK-01000	1	Steel ball
	Eリング゛ 1.0		XRET-01010	5	E ring
	HW1.7X4.0-0.4		XY1-031	2	Washer
	PHK1.7X2.5-5.5X0.7		117-02514	1	Screw
	PHK1.7X1.2-3.0X0.5		117-12114	2	Screw
	PHK1.7X1.5-2.5X0.5		117-15014	2	Screw
	DK 1.7X1.1-2.5X0.45-		947-21619	1	Screw

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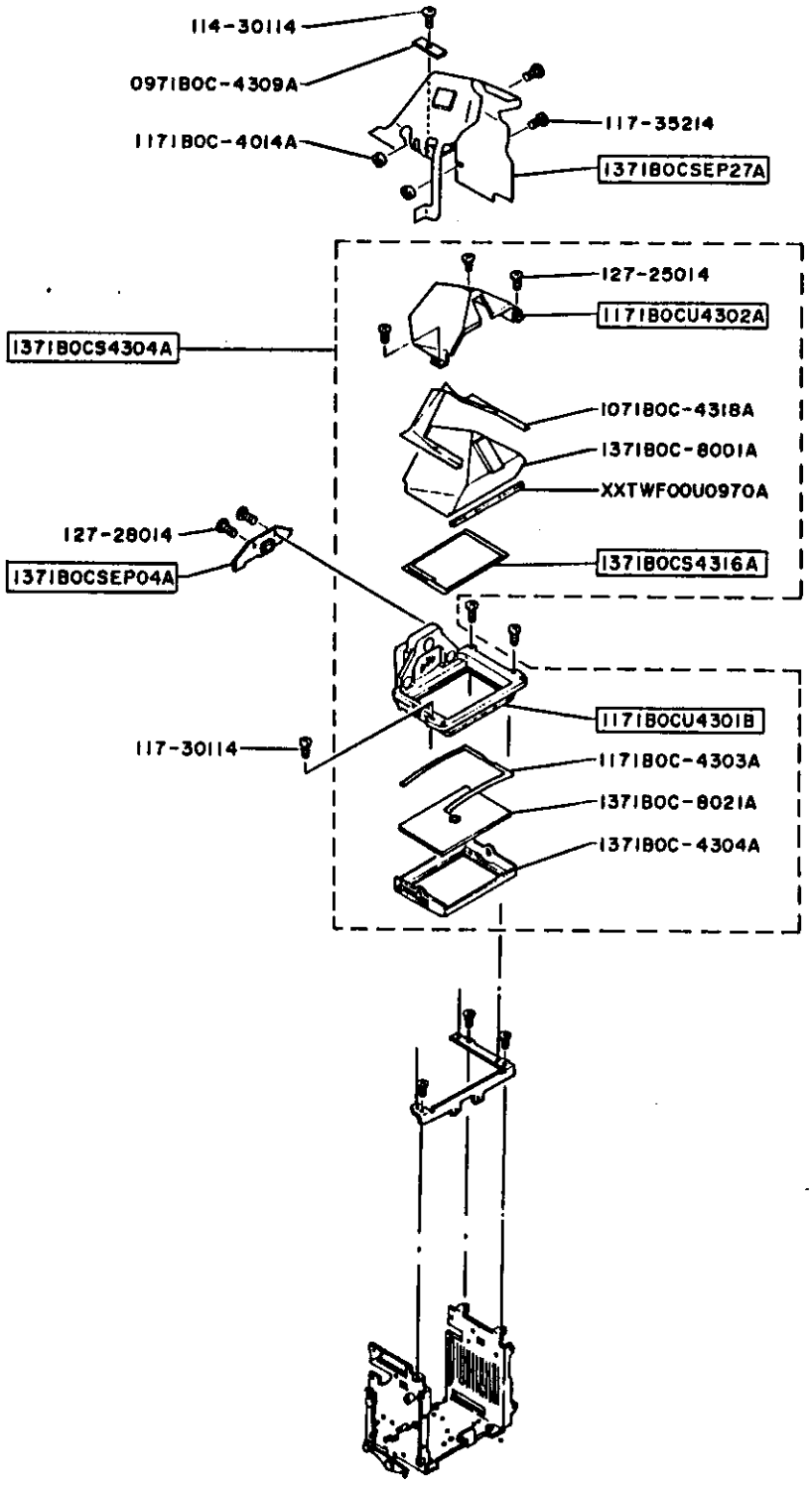
EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM

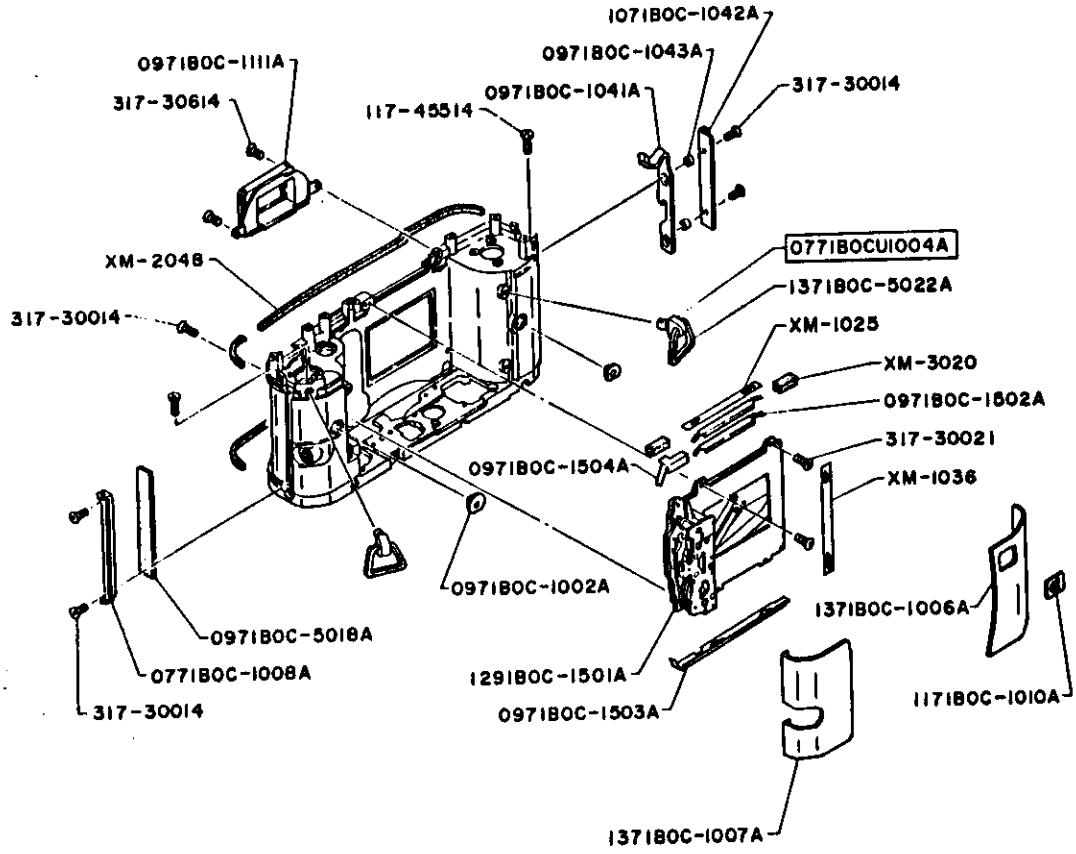


PARTS LIST

FRESNEL LENS BOX & FLEXIBLE PATTERN A

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	ﾆﾒﾝﾃｰﾌﾟﾖﾘ 097	D	XXTWF00U0970A	1	Tape
	ﾍﾟﾝﾀﾜｸ ｾｯﾄ	D	1171B0CU4301B	1	Prism frame
	ﾍﾟﾝﾀｶﾊﾞｰﾃｰﾌﾟ ｾｯﾄ	D	1171B0CU4302A	1	Prism cover
	ﾌﾚﾈﾙﾎﾞｯｸｽ ｾｯﾄ	C	1371B0CS4304A	1	Fresnel lens box
	ﾌﾚﾈﾙﾏｽｸ ｾｯﾄ	G D	1371B0CS4316A	1	Fresnel mask
	ﾌﾟﾘﾝﾄｷﾊﾞﾝD ｾｯﾄ	D	1371B0CSEP04A	1	P.C.Board D
	ﾌﾚｷｼﾌﾞﾙﾊﾟﾀｰﾝA ｾｯﾄ	C	1371B0CSEP27A	1	Frexible pattern A
	ﾐﾗｰﾎﾞｯｸｽﾊﾟﾀｰﾝｳｹ	D	1171B0C-4014A	2	Collar
	ﾌﾚﾈﾙｵｻｴﾊﾞﾈ	D	1171B0C-4303A	1	Spring
	ﾌﾚﾈﾙﾎﾞｯｸｽ	D	1171B0C-4304A	1	Box
	LEDｵｻｴ	D	0971B0C-4309A	1	LED holder
	ﾍﾟﾝﾀﾜｸﾋﾒﾛﾝｼ	D	1071B0C-4318A	1	Shielding tape
	ﾍﾟﾝﾀﾌﾟﾘｽﾞﾑ	C	1371B0C-8001A	1	Prism
	ﾌﾚﾈﾙﾚﾝｽﾞ	C	1371B0C-8021A	1	Fresnel lens
	PHK1.4X3.0-3.0-0.6		114-30114	1	Screw
	PHK1.7X3.0-3.0X0.6		117-30114	3	Screw
	PHK1.7X3.5-3.5X0.6		117-35214	2	Screw
	THK1.7X2.5-2.5X0.5		127-25014	3	Screw
	THK1.7X2.8-2.5X0.5		127-28014	2	Screw

EXPLODED VIEW
OF
CHINON CP-5 TWIN PROGRAM



SHUTTER

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	ﾂﾘｶﾝ (ﾋﾟﾝ ｱﾘﾆｮｳ)	D	0771B0CU1004A	2	Wrist strap lug
	ﾎﾝﾀｲﾓｰﾙﾄﾞ	D	0971B0C-1002A	2	Shielding plastic
	ﾏｴﾚｻﾞｰﾐｷﾞ	A	1371B0C-1006A	1	Leather(R)
	ﾏｴﾚｻﾞｰﾋﾀﾞﾘ	A	1371B0C-1007A	1	Leather(L)
	ｳﾗﾌﾞﾀｼﾞｸｳｹ	D	0771B0C-1008A	1	Shaft retainer
	AFﾏｰｸ	D	1171B0C-1010A	1	AF mark
	ｶｲﾍｲﾂﾒ	D	0971B0C-1041A	1	Door latch
	ｶｲﾍｲｶﾊﾞｰ	D	1071B0C-1042A	1	Door latch cover
	ｶｲﾍｲｶﾗｰ	D	0971B0C-1043A	1	Collar
	ｾﾂｶﾞﾝｻﾞ	D	0971B0C-1111A	1	Eyepiece base
	ｼｬｯﾀｰ	C	1291B0C-1501A	1	Shutter
	Sｼｬｺｳﾊﾞﾝｳｴ	D	0971B0C-1502A	1	Shielding plate
	Sｼｬｺｳﾊﾞﾝｼﾀ	D	0971B0C-1503A	1	Shielding plate
	ｼｬｯﾀｰｿｸﾒﾝﾊﾞﾝ	D	0971B0C-1504A	1	Side plate
	ﾎﾝﾀｲﾃﾚﾝﾌﾟ	D	0971B0C-5018A	1	Ribbon
	ｻﾝｶｸｶﾝ	D	1371B0C-5022A	2	Wrist strap lug
	ｾﾂｶﾞﾝｻﾞﾊﾟｯｷﾝB 077		XM-1025	1	Sponge
	ﾎﾝﾀｲｿｸﾒﾝﾊﾟｯｷﾝ 097		XM-1036	1	Sponge
	ﾎﾝﾀｲﾊﾟｯｷﾝ 097		XM-2048	2	Sponge
	ｼｬｯﾀｰﾊﾟｯｷﾝｳｴ 097		XM-3020	2	Sponge
	PHK1.7X4.5-2.5X0.8		117-45514	2	Screw
	PSK1.7X3.0-2.5X0.5		317-30014	5	Screw
	PSK1.7X3.0-2.5X0.5		317-30021	2	Screw
	PSK1.7X3.0-3.0X0.8		317-30614	2	Screw

EXPLODED VIEW
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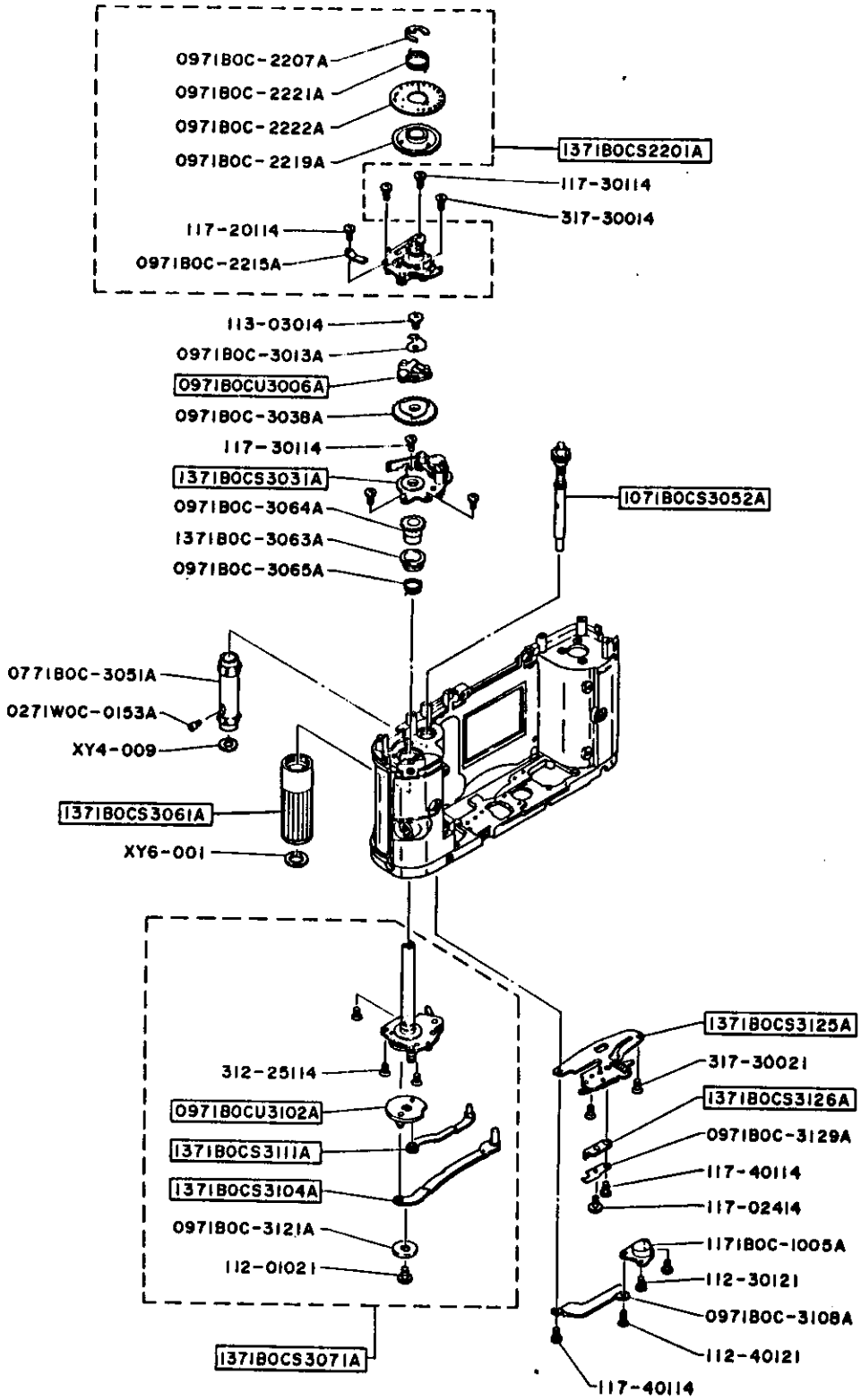
CHINON CP-5 TWIN PROGRAM



WINDING MECHANISM

ORDER QTY	部 品 名 称	CLASS	PARTS NO.	QTY	PARTS NAME
	Cキバ" ン セット	C	1371B0CS2201A	1	Counter
	オクリツメサ" セット	D	0971B0CU3006A	1	Transport claw
	マキアケ" キバ" ンウエ セット	D	1371B0CS3031A	1	Winding base plate(Upper)
	スプ" ロケットシ" ク セット	D	1071B0CS3052A	1	Sprocket shaft
	リールトウ セット	D	1371B0CS3061A	1	Take-up spool
	マキアケ" キバ" ンシタ セット	D	1371B0CS3071A	1	Winding base plate(Lower)
	ケイシカム セット	D	0971B0CU3102A	1	Stop cam
	チャージ" レバ" -A セット	D	1371B0CS3104A	1	Charge lever A
	チャージ" レバ" -B セット	D	1371B0CS3111A	1	Charge lever B
	マキアケ" カ" イト" キバ" ン セット	D	1371B0CS3125A	1	Guide base plate
	ワインタ" -SWタ" イ セット	C	1371B0CS3126A	1	Winder switch
	スプ" ロケットレント" ウネジ"	D	0271W0C-0153A	1	Screw
	サンキャクサ"	D	1171B0C-1005A	1	Tripod socket
	Cラチェットオサエ	D	0971B0C-2207A	1	Set ring
	Cシヒョウ	D	0971B0C-2215A	1	Counter indicator
	Cラチェット	D	0971B0C-2219A	1	Counter ratchet
	CSP	D	0971B0C-2221A	1	Spring
	C7" レート	D	0971B0C-2222A	1	Counter plate
	オクリツメオサエ	D	0971B0C-3013A	1	Claw pressure plate
	1バ" ンキ" ヤ	D	0971B0C-3038A	1	First gear
	スプ" ロケット	D	0771B0C-3051A	1	Sprocket
	リールスリーブ"	D	1371B0C-3063A	1	Reel sleeve
	リールキ" ヤ	D	0971B0C-3064A	1	Gear
	リールフリクションSP	D	0971B0C-3065A	1	Friction spring
	チャージ" レバ" -オサエ	D	0971B0C-3108A	1	Charge lever holder
	レンケツツメ	D	0971B0C-3121A	1	Winder link claw
	ワインタ" -SWカバ" -	D	0971B0C-3129A	1	Cover
	ワッシャー 4.2X8.0-0.2		XY4-009	1	Washer
	ワッシャー 6.2X9.0-0.2		XY6-001	1	Washer
	PHK2.0X3.0-5.0X0.6		112-01021	1	Screw
	PHK2.0X3.0-3.0X0.6		112-30121	2	Screw
	PHK2.0X4.0-3.0X0.6		112-40121	1	Screw
	PHK2.3X3.5-6.0X0.6		113-03014	1	Screw
	PHK1.7X3.7-5.0X0.6		117-02414	1	Screw
	PHK1.7X2.0-3.0X0.6		117-20114	1	Screw
	PHK1.7X3.0-3.0X0.6		117-30114	5	Screw
	PHK1.7X4.0-3.0X0.6		117-40114	2	Screw
	PSK2.0X2.5-3.0X0.6		312-25114	3	Screw
	PSK1.7X3.0-2.5X0.5		317-30014	1	Screw
	PSK1.7X3.0-2.5X0.5		317-30021	2	Screw

CHINON

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